3.5" Single Board Computers

Selection Guide

Model Name		PCM-9342	PCM-9343
Module Type		3.5" SBC	3.5" SBC
Processor System	CPU	Advantech EVA-X4150	DM&P Vortex86DX 1.0 GHz, supports floating point unit (FPU)
	Front Side Bus	-	-
	Frequency	133 MHz	1.0 GHz
	L2 Cache	-	256 KB
	System Chipset	Advantech EVA-X4150 SoC + SMI SM712	DM&P Vortex86DX + SMI SM712
	BIOS	Award 4 Mbit	Award integrated 16 Mbit ROM in SOC
Memory	Technology	DDR SDRAM	DDR2 333 MHz SDRAM on board
	Max. Capacity	64 MB	512 MB
	Socket	-	-
	Onboard Memory	On board 64 MB SDRAM	On board 256 MB or 512 MB
Display	Chipset	SMI SM712 2D graphics chip	SMI SM712 2D graphics chip
	LVDS	1 x 18-bit LVDS (Alternate to TTL)	Supports up to 1024 x 768 @ 24-bit LVDS LCD Panel (1280 x 1024 possible, supported by request)
	VGA	CRT: supports 1024 x 768 @ 24-bit true color	Supports up to 1024 x 768 @ 85 Hz (1280 x 1024 possible, supported by request)
	TTL LCD	TTL: supports 1024 x 768 @ 18-bit TFT LCD Panel (Alternate to LVDS)	Supports up to 1024 x 768 @ 24-bit TFT LCD Panel (1280 x 1024 possible, supported by request)
	DVI	-	-
	Dual Display	CRT + LVDS or CRT + TTL	CRT + TTL, CRT + LVDS
Ethernet	Speed	10/100 Mbps on LAN	10/100 Mbps on LAN1 10/100 Mbps on LAN2
Audio	Chipset	-	-
WatchDog Timer		255 level timer interval, setup by software	Internal: 2 sets, From 30.5µ sec to 512 sec with resolution 30.5µ sec
Storage	CompactFlash	Supports CompactFlash Card TYPE I/II (Primary Master IDE Channel) Supports 2 channels Ultra-DMA 100	Supports CompactFlash Card TYPE I/II (Primary Master IDE Channel) Supports 2 channels Ultra-DMA 100
	SATA	2	1
	IDE	-	-
	Floppy	1 (shared with LPT)	-
	SPI Flash	-	Optional onboard 4MB SPI Flash Disk (Supported by request)
Rear I/O	Serial	1 (COM1 supports RS-232)	1 (COM1 supports RS-232)
	Ethernet	1 (10/100 Mbps LAN1)	1 (10/100 Mbps LAN1)
	KB/Mouse	1	1
	VGA	1	1
	USB	-	-
	Reset Button	1	1
Internal I/O	USB	2 x USB 2.0	4 x USB 2.0
	Serial	1x RS-232/422/485, 2 x RS-232	1 x RS-232/422/485 ,2 x RS-232
	IDE	-	-
	Parallel (LPT)	1 (share with FDD)	1
	FDD	1 (share with LPT)	-
	SMBUS	-	-
	KB/Mouse	-	-
	GPIO	8-bit GPIO	16-bit GPIO
	IrDA		
	I²C	-	1
Expansion	PC/104 Slot	PC/104 Expansion (8/16-Bit ISA)	PC/104 Expansion (8/16-Bit ISA)
	PCI-104 Slot	-	-
	Mini PCI Express	-	-
	MIO 160	-	-
Power	Power Type	AT	AT
	Power Supply Voltage	Single +5V boot up, (+12V for LCD, ISA)	Single +5V boot up, (+12V for LCD, ISA)
	Power Consumption (Typical)	Typical: 1.18 A @ 5 V	PCM-9343L-S6A1E: 5V : 0.44 A PCM-9343F-S6A1E: 5V : 0.81 A PCM-9343FG-S6A1E: 5 V : 1.03 A
	Power Consumption (Max, test in HCT)	-	PCM-9343L-S6A1E: 5V : 0.746 A PCM-9343F-S6A1E: 5V : 1.09 A PCM-9343FG-S6A1E: 5 V : 1.18 A
	Power Management	-	-
	Battery	3 V / 210 mAH	Lithium 3 V / 210 mAH
Environment	Operational	0 ~ 60° C (32 ~ 140° F)	0 ~ 60° C (32 ~ 140° F)
	Non-Operational	Operating: 0 ~ 60° C (32 ~ 140° F) (Operating humidity: 40° C @ 85% RH non-condensing) Non-Operating: -40° C ~ 85° C and 60° C @ 95% RH non-condensing	Operating: 0 ~ 60° C (32 ~ 140° F) (Operating humidity: 40° C @ 85% RH non-condensing) Non-Operating: -40° C ~ 85° C and 60° C @ 95% RH non-condensing
Physical Characteristics	Dimensions (L x W)	146 x 102 mm (5.7" x 4")	146 x 102 mm (5.7" x 4")
	Weight	0.85 kg (1.87 lb), weight of total package	0.85 kg (1.87 lb), weight of total package
Reference Page		3-4	3-6

PCM-9361	PCM-9362
3.5" SBC	3.5" SBC
Intel Atom processor N270 1.60 GHz	Intel Atom processor N450 Single Core 1.66 GHz Intel Atom processor D510 Dual Core 1.66 GHz
533 MHz	667 MHz
1.60 GHz	1.66 GHz
512 KB	512 KB/1 MB
Intel 945GSE+ ICH7M	Intel N450/D510 + ICH8M
Award 4 Mbit	AMI 16 Mbit Flash BIOS
DDR2 400/533 MHz	DDR2 667 MHz
2 GB	2 GB
1 x 200-pin SODIMM	1 x 200-pin SODIMM
-	-
Intel 945GSE	Intel Atom processor N450/D510 1.66 GHz
LVDS1: Supports 2 channel 36-bit LVDS panel, LVDS2: Supports 2 channel 48-bit LVDS Panel (only for PCM-9361EVG) LVDS2 wide screen supported: EX:1366 x 768 (24-bit), 1440 x 900 (48-bit), 1680 x 1050 (48-bit), 1920 x 1080 (48-bit)	LVDS: Single channel 18-bit LVDS up to WXGA 1366 x 768
Supports QXGA Up to 2048 x 1536	Intel Atom processor N450 Single Core up to 1400 x 1050 (SXGA) Intel Atom processor D510 Dual Core up to 2048 x 1536
18-bit TTL: Up to 640 x 480, 800 x 600	-
-	-
- CRT + LVDS - CRT + TTL - LVDS1+LVDS2 (not supported in DOS mode, only for PCM-9361EVG)	CRT+LVDS
10/100/1000 Mbps	10/100/1000 Mbps
Realtek ALC888 High Definition Audio (HD), Line-in, Line out, Mic-in	Realtek ALC888 High Definition Audio (HD), Line-in, Line out, Mic-in
Output System reset Programmable 1 ~ 255 sec	Output System reset Programmable 1 ~ 255 sec
Supports CompactFlash Card TYPE I/II (Primary Master IDE Channel)	Supports CompactFlash Card TYPE I/II (Primary Master IDE Channel)
2	2
-	-
1 (share with LPT)	-
-	-
1 (COM1 supports RS-232)	1 (COM1 supports RS-232)
1 (10/100/1000 Mbps LAN1)	2 (10/100/1000 Mbps)
1	-
1	1
1	2
-	-
4 x USB 2.0	4 x USB 2.0
1 x RS-232/422/485 ,1 x RS-232	2 x RS-232, 1 x RS-232/422/485
-	-
1	1
1 (share with LPT)	-
1	-
-	1
8-bit GPIO	8-bit GPIO
1	1
-	-
PCI-104 Expansion	-
-	1
-	1 (Optional by request)
AT/ATX	AT/ATX
ATX: +5 V ± 5%, ±12 V ± 5% AT: 5V only to boot up (12 V is optional for LCD inverter and add on card)	AT: 5 V or 12 V, ATX: 5 V, 5 V sb (12 V is optional for LCD inverter and add on card) AT: 12 V, ATX: 12 V, 5 V sb
5V,12V Typical 1.90 A,0.07 A Suspend 1.36 A,0.06 A	PCM-9362NC-S6A1E: 5 V : 2.31 A PCM-9362N-S6A1E: 12 V : 0.87 A PCM-9362D-S6A1E: 12 V : 0.91 A
5V, 12V Max Load 2.38 A, 0.09 A	PCM-9362NC-S6A1E: 5 V : 2.36 A PCM-9362N-S6A1E: 12 V : 1.01 A PCM-9362D-S6A1E: 12 V : 1.17 A
APM1.2, ACPI3.0, wake on LAN, and modem ring-in functions	APM, ACPI
Lithium 3 V/210 mAH	Lithium 3 V/210 mAH
0 ~ 60° C (32 ~ 140° F)	0 ~ 60° C (32 ~ 140° F)
Operating: 0 ~ 60° C (32 ~ 140° F) (Operating humidity: 40° C @ 85% RH non-condensing) Non-Operating:-40° C ~ 85° C and 60° C @ 95% RH non-condensing	Operating: 0 ~ 60° C (32 ~ 140° F) (Operating humidity: 40° C @ 85% RH non-condensing) Non-Operating: -40° C ~ 85° C and 60° C @ 95% RH non-condensing
146 x 102 mm (5.7" x 4")	146 x 102 mm (5.7" x 4")

3.5" Single Board Computers

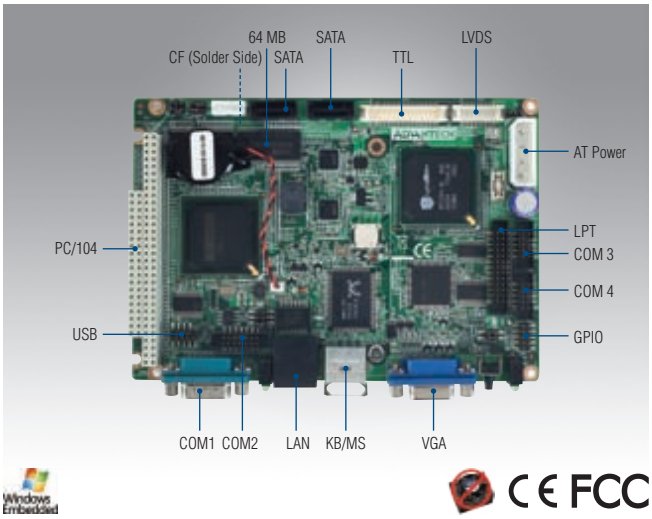
Selection Guide

Model Name		PCM-9375	PCM-9380
Module Type		3.5" SBC	3.5" SBC
Processor System	CPU	AMD Geode LX800 processor, up to 500 MHz	Intel Pentium M/ Celeron M processor socket 478 type
	Front Side Bus	-	400 MHz
	Frequency	500 MHz	Depends on processor
	L2 Cache	128 KB	-
	System Chipset	AMD Geode LX800	Intel 855GME + ICH4
	BIOS	Award 4 Mb Flash ROM BIOS	Award 4 Mb Flash ROM BIOS
Memory	Technology	DDR 333/400 MHz	DDR 200/266/333MHz SO-DIMM supported
	Max. Capacity	512 MB (1 GB optional)	1 GB
	Socket	1 x 200-pin SODIMM	1 x 200-pin SODIMM
	Onboard Memory	-	-
Display	Chipset	AMD Geode LX800	Intel 855GME
	LVDS	1 x 18-bit LVDS (PCM-9375E), up to 1600 x 1200 x 32 bpp at 60 Hz	1 x 36-bit LVDS (48-bit optional)
	VGA	CRT: up to 1920 x 1440 @ 32bpp(85 Hz)	CRT: up to 1600 x 1200 @ 32bpp (85 Hz)
	TTL LCD	1 x 24-bit TTL (PCM-9375F), up to 1600 x 1200 x 32 bpp at 60 Hz	-
	DVI	-	-
	Dual Display	CRT+TTL, CRT+LVDS	CRT + LVDS CRT + TV-out / LVDS + TV-out (w/MIO-6254)
Ethernet	Speed	10/100 Mbps	10/100 Mbps 10/100/1000 Mbps (optional)
Audio	Chipset	Realtek ALC203 AC97, Line-in, Line-out, Mic-in	Realtek ALC203 AC97, Line-in, Line-out, Mic-in
WatchDog Timer		Output System reset Programmable 1 ~ 255 sec	Output System reset Programmable 1 ~ 255 sec
Storage	CompactFlash	1	1
	SATA	1	-
	IDE	1	1
	Floppy	1 (share with LPT)	1
	SPI Flash	-	-
Rear I/O	Serial	1 (COM1 supports RS-232)	1 (COM1 supports RS-232)
	Ethernet	1 (10/100 Mbps)	1 (10/100 Mbps)
	KB/Mouse	1	1
	VGA	1	1
	USB	-	1
	Reset Button	1	-
Internal I/O	USB	4 x USB 2.0	2 x USB 2.0
	Serial	2 x RS-232,1 x RS-232/422/485	1 x RS-232,1 x RS-232/422/485
	IDE	1 UDMA 33/66	1
	Parallel (LPT)	1 (shared with LPT)	1
	FDD	1 (shared with LPT)	1
	SMBUS	-	Supported
	KB/Mouse	-	1
	GPIO	8-bit GPIO	8-bit GPIO
	IrDA	-	115 kbps, SIR, IrDA 1.0 complaint
	I^2C	optional	-
Expansion	PC/104 Slot	PC/104 Expansion (8/16-Bit ISA)	-
	PCI-104 Slot	-	-
	Mini PCI Express	-	-
	MIO 160	-	1
Power	Power Type	AT/ATX	AT/ATX
	Power Supply Voltage	5V + 5%, 12V + 5% (LCD, PC/104)	5V + 5%, 12V + 5% (LCD)
	Power Consumption (Typical)	Typical: 0.6 A @ 5 V, 0.03 A @ 12 V	Typical: 3.0 A @ 5 V, 0.04 A @ 12 V (Pentium M 1.8G, DDR266/256 MB)
	Power Consumption (Max, test in HCT)	MAX: 1.2 A @ 5 V, 0.23 A @ 12 V	MAX: 4.26 A @ 5 V, 0.13 A @ 12 V (Pentium M 1.8G, DDR266/256 MB)
	Power Management	APM 1.2, ACPI	APM1.2, ACPI2.0, wake on LAN, and modem ring-in functions
	Battery	Lithium 3 V/196 mAH	Lithium 3 V/196 mAH
Environment	Operational	0 ~ 60° C (32 ~ 140° F)	0 ~ 60° C (32 ~ 140° F)
	Non-Operational	Operating: 0 ~ 60° C (32 ~ 140° F) (Operating humidity: 40° C @ 85% RH non-condensing) Non-Operating: -40° C ~ 85° C and 60° C @ 95% RH non-condensing	Operating: 0 ~ 60° C (32 ~ 140° F) (Operating humidity: 40° C @ 85% RH non-condensing) Non-Operating: -40° C ~ 85° C and 60° C @ 95% RH non-condensing
Physical	Dimensions (L x W)	146 x 102 mm (5.7" x 4")	146 x 102 mm (5.7" x 4")
Reference Page		3-12	3-16

PCM-9382	PCM-9386	PCM-9388
3.5" SBC	3.5" SBC	3.5" SBC
Intel Core 2 Duo/Dore Duo/Core Solo processor FSB667Mhz socket 478 type, up to Intel Core2 Duo T74000 Intel Celeron M 1.06 GHz (423) Onboard CPU	Intel Celeron M processor 600 MHz and 1.0 GHz on board type	Intel Celeron M processor 600 MHz and 1.0 GHz on board type
533/667 MHz	400Mhz	400 MHz
Depends on processor	600 MHz and 1.0 GHz	600 MHz and 1.0 GHz
-	512 KB on 600 MHz, 0L2 on 1 GHz	512 KB on 600 MHz, 0L2 on 1.0 GHz
Intel 945GME + ICH7M	Intel 852GM + ICH4	Intel 852GM + ICH4
Award 4 Mb Flash ROM BIOS	Award 4 Mb Flash ROM BIOS	Award 4 Mb Flash ROM BIOS
DDRII 533/667 MHz SO-DIMM	DDR200/266 MHz SO-DIMM supported	DDR266MHz SO-DIMM supported
2 GB	1 GB	1 GB
1 x 200-pin SODIMM	1 x 200-pin SODIMM	1 x 200-pin SODIMM
-	-	-
Intel 945GME	Intel 852GM	Intel 852GM
1x48-bit LVDS	1 x 36-bit LVDS (48-bit optional)	1 x 36-bit LVDS (48-bit optional)
CRT: up to 2048 x 1536 @ 32bpp (85 Hz)	CRT: up to 1600 x 1200 @ 32bpp (85 Hz)	CRT: up to 1600 x 1200 @ 32bpp (85 Hz)
-	-	1 x 18-bit TTL
-	-	-
CRT+LVDS	CRT + LVDS CRT + TV-out/LVDS + TV-out (w/MIO-6254)	CRT + TTL, CRT + LVDS
10/100 Mbps	10/100 Mbps 10/100/1000 Mbps (optional)	10/100 Mbps
Realtek ALC888, High Definition Audio(HD),Line-in, Line out, Mic-in	Realtek ALC203 AC97, Line-in, Line-out, Mic-in	Realtek ALC203 AC97, Line-in, Line-out, Mic-in
Output System reset Programmable 1 ~ 255 sec	Output System reset Programmable 1 ~ 255 sec	Output System reset Programmable 1 ~ 255 sec
1	1	1
1 (150 MB/s)	-	1 (only for PCM-9388S)
-	1	1 (only for PCM-9388F)
-	1	1 (share with LPT)
-	-	-
1 (COM1 supports RS-232)	1 (COM1 supports RS-232)	1 (COM1 supports RS-232)
1 (10/100 Mbps)	1 (10/100 Mbps)	1 (10/100 Mbps)
1	1	1
1	1	1
1	1	-
-	-	1
4 x USB 2.0	2 x USB 2.0	2 x USB 2.0
1 x RS-232,1 x RS-232/422/485	1 x RS-232,1 x RS-232/422/485	1 x RS-232,1 x RS-232/422/485
-	1	1 UDMA 33 (only for PCM-9388F)
-	1	1 (share with LPT)
-	1	1 (share with LPT)
Supported	Supported	Supported
1	1	-
8-bit GPIO	8-bit GPIO	8-bit GPIO
-	115 kbps, SIR, IrDA 1.0 complaint	115 kbps
-	-	-
-	-	PC/104 Expansion (8/16-Bit ISA)
-	-	-
-	-	-
1	1	-
AT/ATX	AT/ATX	AT/ATX
5V + 5%, 12V + 5% (LCD)	5V + 5%, 12 V + 5% (LCD)	5 V + 5%, 12 V + 5% (LCD)
Typical: 4.64 A @ 5 V, 0.09 A @ 12 V (Core Duo 2.16G/DDRII 533/512 MB)	Typical: 2.0 A @ 5 V, 0.02 A @ 12 V (Celeron M 600, DDR266/256 MB)	Typical: 1.56 A @ 5 V, 0.16 A @ 12 V (Celeron M 600/DDR 256 MB)
MAX: 5.14 A @ 5 V, 0.15 A @ 12 V (Core Duo 2.16G/DDRII 533/512 MB)	MAX: 2.0 A @ 5 V, 0.02 A @ 12 V (Celeron M 600, DDR266/256 MB)	MAX: 2.11 A @ 5 V, 0.17 A @ 12 V (Celeron M 600/DDR 256 MB)
APM1.2, ACPI2.0, wake on LAN, and modem ring-in functions	APM1.2, ACPI2.0, wake on LAN, and modem ring-in functions	APM, ACPI S1, S5
Lithium 3 V/210 mAH	Lithium 3 V/ 196 mAH	3 V/210 mAH
0 ~ 60° C (32 ~ 140° F)	0 ~ 60° C (32 ~ 140° F)	0 ~ 60° C (32 ~ 140° F)
Operating: 0 ~ 60° C (32 ~ 140° F) (Operating humidity: 40° C @ 85% RH non-condensing) Non-Operating: -40° C ~ 85° C and 60° C @ 95% RH non-condensing	Operating: 0 ~ 60° C (32 ~ 140° F) (Operating humidity: 40° C @ 85% RH non-condensing) Non-Operating: -40° C ~ 85° C and 60° C @ 95% RH non-condensing	Operating: 0 ~ 60° C (32 ~ 140° F) (Operating humidity: 40° C @ 85% RH non-condensing) Non-Operating: -40° C ~ 85° C and 60° C @ 95% RH non-condensing
146 x 102 mm (5.7" x 4")	146 x 102 mm (5.7" x 4")	146 x 102 mm (5.7" x 4")
0.85 kg (1.87 lb), weight of total package	0.85 kg (1.87 lb), weight of total package	0.85 kg (1.87 lb), weight of total package
3-18	3-20	3-21

PCM-9342

EVA-X4150 x86 SoC 3.5" SBC, CRT, LCD, LAN, USB, SATA, CF, PC/104



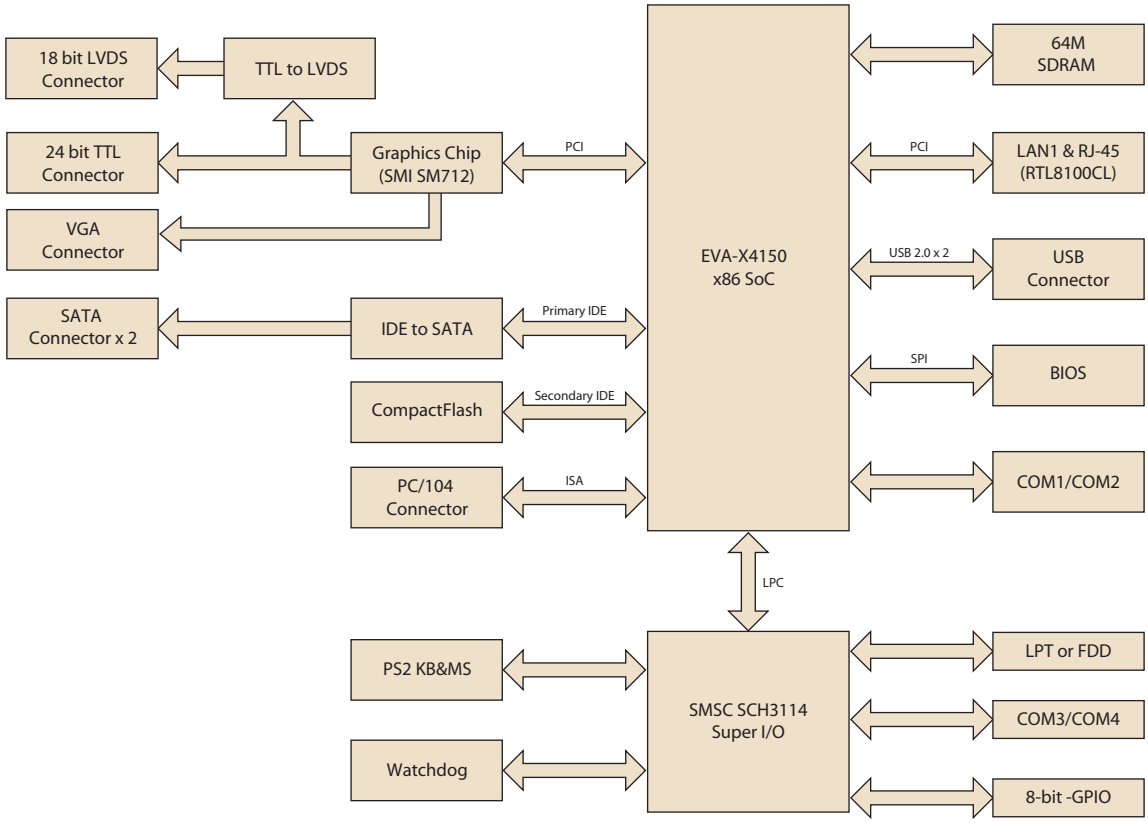
Features

- Low power EVA-X4150 SoC, total less than 6 W power consumption
- Onboard 64 MB SDRAM
- Supports 18-bit TFT LCD
- Supports up to 4 COM ports, 2 USB 2.0 ports
- Supports Serial ATA interface

Specifications

Processor System	CPU	Advantech EVA-X4150
	Frequency	133 MHz
	System Chipset	Advantech EVA-X4150 SoC + SMI SM712
	BIOS	Award 4M bit
Memory	Technology	DDR SDRAM
	Max. Capacity	64 MB
	On board Memory	Onboard 64 MB SDRAM
Display	Chipset	SMI SM712 2D graphics chip
	VRAM	4 MB internal memory
	Graphics Engine	62.5 MHz single clock/cycle engine (EM+) 86 MHz single clock/cycle engine (EM4+) Designed to accelerate DirectDraw
	LVDS	1 x 18-bit LVDS (Alternate to TTL)
	VGA	CRT: supports 1024 x 768 @ 24-bit true color
	TTL LCD	TTL: supports 1024 x 768 @ 18-bit TFT LCD panel (Alternative with LVDS)
	Dual Display	CRT + LVDS or CRT + TTL
Ethernet	Speed	10/100 Mbps on LAN
	Controller	Realtek RTL 8100CL
	Connector	RJ-45 on LAN
WatchDog Timer		255 level timer interval, setup by software
Storage	CompactFlash	Supports CompactFlash Card TYPE I/II (Primary Master IDE Channel) Supports 2 channels Ultra-DMA 100
	SATA	2
	Floppy	1 (shared with LPT)
Rear I/O	Serial	1 (COM1 supports RS-232)
	Ethernet	1 (10/100 Mbps LAN1)
	KB/Mouse	1
	VGA	1
	Reset Button	1
Internal I/O	USB	2 x USB 2.0
	Serial	3 COM (COM2, COM3, COM4) COM2 supports RS-232/422/485 COM3/COM4 supports RS-232
	Parallel(LPT)	1 (share with FDD)
	FDD	1 (share with LPT)
	GPIO	8-bit GPIO
Expansion	PC/104 Slot	PC/104 Expansion (8/16-Bit ISA)
Power	Power Type	AT
	Power Supply Voltage	Single +5V boot up, (+12V for LCD, ISA)
	Power Consumption (Typical)	Typical: 1.18 A @ 5 V
	Battery	3 V / 210 mAH
Environment	Operational	0 ~ 60° C (32 ~ 140° F)
	Non-Operational	Operating: 0 ~ 60° C (32 ~ 140° F) (Operating humidity: 40° C @ 85% RH non-condensing) Non-Operating: -40° C ~ 85° C and 60° C @ 95% RH non-condensing
Physical Characteristics	Dimensions (L x W)	146 x 102 mm (5.7" x 4")
	Weight	0.85 kg (1.87 lb), weight of total package

Board Diagram



Ordering Information

Model	CPU	SDRAM	CRT	LVDS	TTL	LAN	Audio	USB 2.0	RS-232	RS-232/ 422/485	LPT	FDD	Expansion	Thermal Solution	Operating Temp
PCM-9342F-64A1E	EVA-X4150	Onboard 64M	1	1	1	1 FE	-	2	3	1	1 (Share FDD)	1 (Share LPT)	PC/104	Passive	0 ~ 60° C
PCM-9342L-64A1E	EVA-X4150	Onboard 64M	-	-	-	1 FE	-	2	3	1	1 (Share FDD)	1 (Share LPT)	PC/104	Passive	0 ~ 60° C
PCM-9342FZ2-64A1E	EVA-X4150	Onboard 64M	1	1	1	1 FE	-	2	3	1	1 (Share FDD)	1 (Share LPT)	PC/104	Passive	-40 ~ 85° C
PCM-9342LZ2-64A1E	EVA-X4150	Onboard 64M	-	-	-	1 FE	-	2	3	1	1 (Share FDD)	1 (Share LPT)	PC/104	Passive	-40 ~ 85° C

Packing List

Part No.	Description	Quantity
	PCM-9342 SBC	
	Startup Manual	
	Utility CD	
1700008894	SATA 7P 30 cm cable	x 1
1700060202	PS2 6P x 2 20 cm cable	x 1
1700100250	COM3/4 IDE D-SUB 25 cm cable	x 2
1701140201	COM2 IDE D-SUB 20 cm cable	x 1
1700260250	LPT IDE 26P D-SUB 25 cm cable	x 1
1703100121	USB 2 x 5P-2.0 12 cm W/BKT cable	x 1
9689000002	mini Jumper pack	

Optional Accessories

Part No.	Description
1700001531	LPT to FDD cable

Embedded OS

	Part No.	Description
OS	WinCE 5.0	2070006989: Image CE 5.0 Pro EVA-4150-4COM V1.1 ENG
	WinCE 6.0	2070006949: Image CE 6.0 Pro EVA-4150-4COM V1.1 ENG

PCM-9343

DM&P Vortex86DX-1.0 GHz 3.5" SBC, Ultra Low Power, Onboard Memory, Dual LAN, PC/104

Features

- DM&P Vortex86DX, onboard DDR2 memory up to 512 MB
- Display type: CRT, 24-bit LVDS, 24-bit TTL
- Supports Floating Point Unit, total power consumption 4 ~ 6 Watts
- Dual Lan: 10/100 LAN1 and 10/100 LAN2, supports PC/104 (8-bit/16-bit ISA) expansion
- Supports embedded software APIs and utilities, OS: DOS, WinCE, WinXPE and Linux

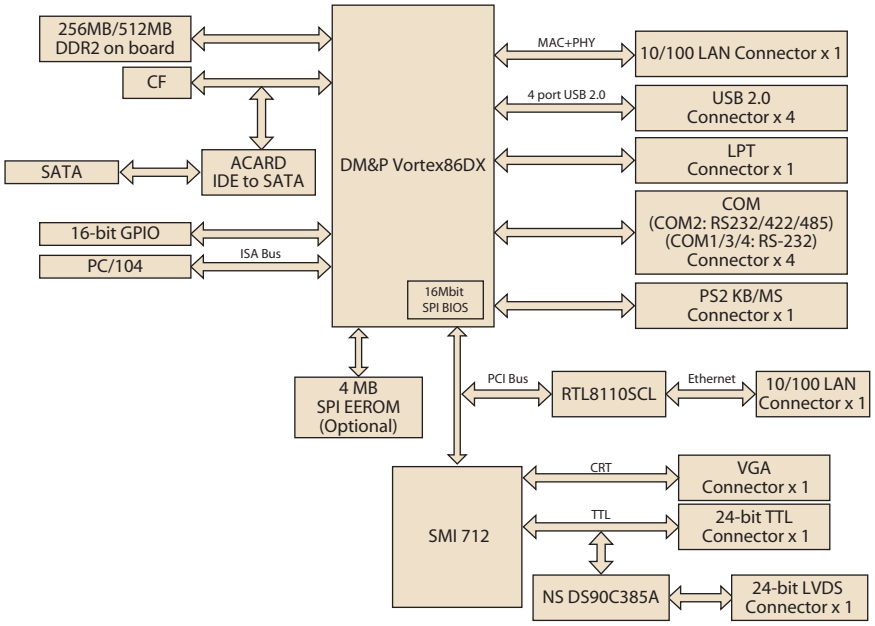
Software APIs: Watchdog, I²C, Brightness, GPIO, Backlight On/Off

Utilities: BIOS flash, eSOS, Flash Lock, Embedded Security ID

Specifications

Processor System	CPU	DM&P Vortex86DX 1.0 GHz, supports floating Point Unit (FPU)
	Frequency	1.0 GHz
	L2 Cache	256 KB
	System Chipset	DM&P Vortex86DX + SMI SM712
	BIOS	Award integrated 16 Mbit ROM in SOC
Memory	Technology	DDR2 333 MHz SDRAM on board
	Max. Capacity	512 MB
	Onboard memory	Onboard 256 MB or 512 MB
Display	Chipset	SMI SM712 2D graphics chip
	VRAM	4 MB internal memory
	Graphics Engine	62.5 MHz single clock/cycle engine (EM+) 86 MHz single clock/cycle engine (EM4+) Designed to accelerate DirectDraw
	LVDS	Supports up to 1024 x 768 @ 24-bit LVDS LCD Panel
	VGA	Supports up to 1024 x 768 @ 85 Hz
	TTL LCD	Supports up to 1024 x 768 @ 24-bit TFT LCD Panel
	Dual Display	CRT + TTL, CRT + LVDS
Ethernet	Speed	10/100 Mbps on LAN1 10/100 Mbps on LAN2
	Controller	LAN1: 10/100 Mbps on DM&P Vortex86DX LAN2: 10/100 Mbps on Realtek RTL8110SC
	Connector	RJ-45 on LAN1, box header on LAN2
WatchDog Timer		Internal: 2 sets, 32.768 kHz frequency source to count a 24-bit counter so the time range is from 30.5μ sec to 512 sec with resolution 30.5μ sec
Storage	CompactFlash	Supports CompactFlash card TYPE I/II (Primary Master IDE Channel) Supports 2 channels Ultra-DMA 100
	SATA	1
	SPI Flash	Optional onboard 4MB SPI Flash Disk (Supported by request)
Rear I/O	Serial	1 (COM1 supports RS-232)
	Ethernet	1 (10/100 Mbps LAN1)
	KB/Mouse	1
	VGA	1
	Reset Button	1
Internal I/O	USB	4 x USB 2.0
	Serial	3 COM (COM2, COM3, COM4) COM2 supports RS-232/422/485 COM3/COM4 supports RS-232
	Parallel(LPT)	1
	GPIO	16-bit GPIO
	I²C	1
Expansion	PC/104 slot	PC/104 Expansion(8/16-Bit ISA)
Power	Power Type	AT
	Power Supply Voltage	Single +5V boot up, (+12V for LCD, ISA)
	Power Consumption (Typical)	PCM-9343L-S6A1E: 5V : 0.44 A PCM-9343F-S6A1E: 5V : 0.81 A PCM-9343FG-S6A1E: 5 V : 1.03 A
	Power Consumption (Max, test in HCT)	PCM-9343L-S6A1E: 5V : 0.746 A PCM-9343F-S6A1E: 5V : 1.09 A PCM-9343FG-S6A1E: 5 V : 1.18 A
	Battery	Lithium 3 V / 210 mAH
Environment	Operational	0 ~ 60° C (32 ~ 140° F)
	Non-Operational	Operating: 0 ~ 60° C (32 ~ 140° F) (Operating humidity: 40° C @ 85% RH non-condensing) Non-Operating: -40° C ~ 85° C and 60° C @ 95% RH non-condensing
Physical Characteristics	Dimensions (L x W)	146 x 102 mm (5.7" x 4")
	Weight	0.85 kg (1.87 lb), weight of total package

Board Diagram



Ordering Information

Part No.	Onboard Memory	TTL	LVDS	CRT	10/100 LAN1	10/100 LAN2	Buzzer	LPT	RS-232/ 422/485	RS-232	USB 2.0	CF	SATA	Expansion	ATX Power	AT Power	Thermal Solution	Operational Temp.
PCM-9343L-S6A1E	256 MB	-	-	-	1	-	Yes	1	1	1	2	1	-	PC/104	-	Yes	Passive	0 ~ 60° C
PCM-9343F-S6A1E	256 MB	24-bit	24-bit	Yes	1	-	Yes	1	1	3	4	1	1	PC/104	-	Yes	Passive	0 ~ 60° C
PCM-9343FG-S6A1E	512 MB	24-bit	24-bit	Yes	1	1	Yes	1	1	3	4	1	1	PC/104	-	Yes	Passive	0 ~ 60° C
PCM-9343FGZ-S6A1E	512 MB	24-bit	24-bit	Yes	1	1	Yes	1	1	3	4	1	1	PC/104	-	Yes	Passive	-20 ~ 80° C

Packing List

Part No.	Description	Quantity
	PCM-9343 SBC	
	Startup Manual	
	Utility CD	
1700008894	SATA 7P 30 cm cable	x 1
1700060202	PS2 6P x 2 20 cm cable	x 1
1700100250	COM3/4 IDE D-SUB 25 cm cable	x 2
1701140201	COM2 IDE D-SUB 20 cm cable	x 1
1700260250	LPT IDE 26P D-SUB 25 cm cable	x 1
1703100121	USB 2 x 5P-2.0 12 cm W/BKT cable	x 1
1700002142	LAN IDE 2.0 15 cm cable	x 1

Optional Accessories

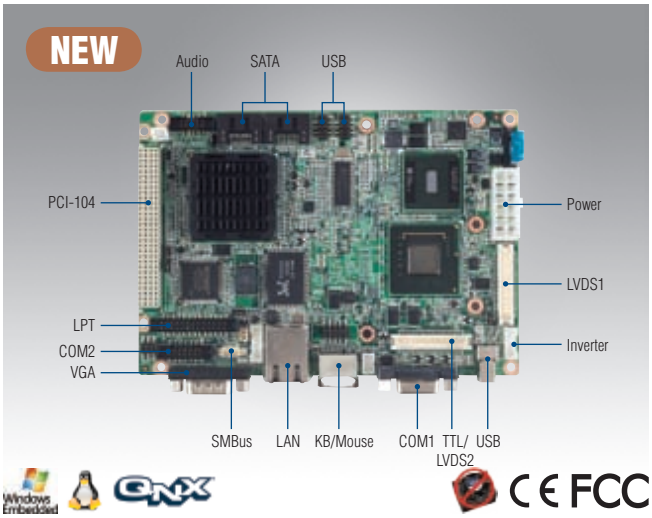
Part No.	Description
1703150102	SATA 10 cm Power cable

Embedded OS

	Part No.	Description
OS	WinCE 6.0	2070009537: Image CE 6.0 Pro PCM-9343 V1.3 ENG
	XPE	20070009528: Image XPE for PCM-9343
	SUSI	2056343000: SUSI 3.0 SW API for PCM-9343 B:20100122 XP

PCM-9361

Intel® Atom™ N270 3.5" SBC, Dual LVDS, TTL, CRT, LAN, USB, SATA, PCI-104



Features

- Intel® Atom™ Processor N270+ 945GSE+ ICH7M
- Supports 18-bit TTL/CRT/36-bit LVDS1/48-bit LVDS2 (including Wide screen)
- Supports Giga LAN/HD Audio
- Supports up to 2 COM ports, 5 USB 2.0 ports, 2 SATA Interfaces
- Supports embedded software API and utility
- Supported OS: Win XP embedded, Win XP Pro, WinCE6.0, Linux, QNX

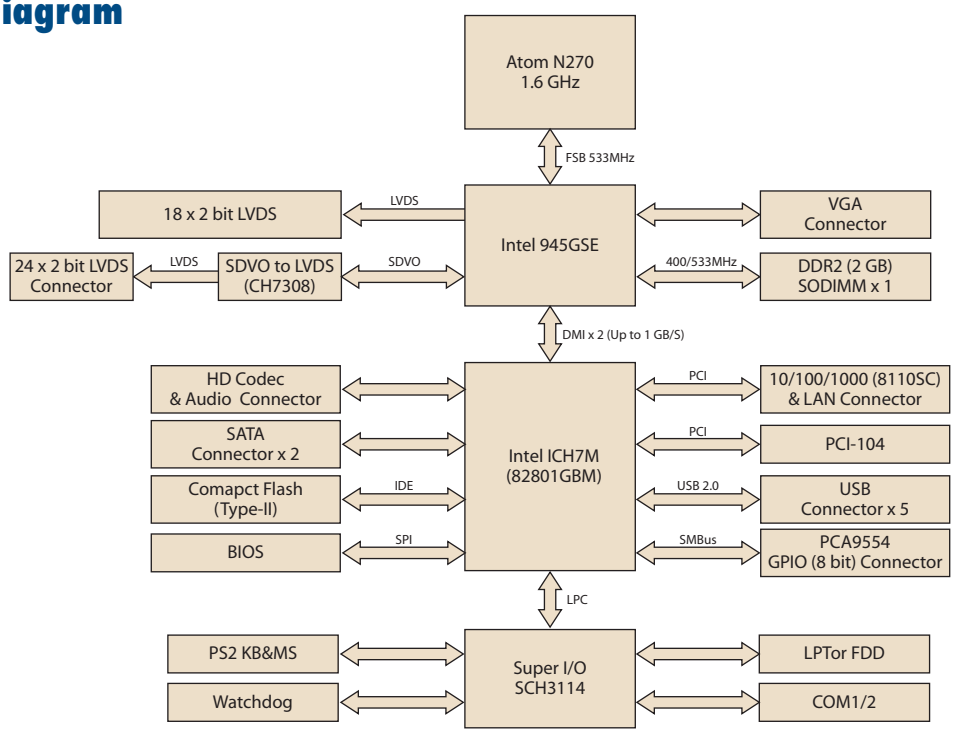
Software APIs: GPIO, H/W Monitor, Brightness, Watchdog, Backlight On/Off, SMBus, CPU Speed, System Throttling

Utilities: BIOS flash, Monitoring, eSOS, Flash Lock, Embedded Security ID

Specifications

Processor System	CPU	Intel Atom N270 1.60 GHz	
	Front Side Bus	533 MHz	
	Frequency	1.60 GHz	
	L2 Cache	512 KB	
	System Chipset	Intel 945GSE+ ICH7M	
	BIOS	Award 4 Mbit	
Memory	Technology	DDR2 400/533 MHz	
	Max. Capacity	2 GB	
	Socket	1 x 200-pin SODIMM	
Display	Chipset	Intel 945GSE	
	VRAM	Optimized shared memory architecture up to 224 MB system memory	
	Graphics Engine	Intel 3.5 Gen integrated graphics engine	
	LVDS	LVDS1: Supports 2 channel 36-bit LVDS panel LVDS2: Supports 2 channel 48-bit LVDS panel (only for PCM-9361EVG) LVDS2 wide screen supports: EX:1366 x 768 (24-bit), 1440 x 900 (48-bit), 1680 x 1050 (48-bit), 1920 x 1080 (48-bit)	
	VGA	Supports QXGA Up to 2048 x 1536	
	TTL LCD	18-bit TTL: Up to 640 x 480, 800 x 600	
	Dual Display	- CRT + LVDS - CRT + TTL - LVDS1 + LVDS2 (not supported in DOS mode, only for PCM-9361EVG)	
Ethernet	Speed	10/100/1000 Mbps	
	Controller	Realtek 8110SC	
	Connector	RJ-45 on LAN	
Audio	Chipset	Realtek ALC888, High Definition Audio (HD), Line-in, Line out, Mic-in	
WatchDog Timer		Output system reset, Programmable 1 ~ 255 sec	
Storage	CompactFlash	Supports CompactFlash card TYPE I/II (Primary Master IDE Channel)	
	SATA	2	
	Floppy	1 (shared with LPT)	
Rear I/O	Serial	1 (COM1 supports RS-232)	
	Ethernet	1 (10/100/1000 Mbps LAN1)	
	KB/Mouse	1	
	VGA	1	
	USB	1	
Internal I/O	USB	4 x USB 2.0	
	Serial	1 x COM COM2 supports RS-232/422/485	
	Parallel(LPT)	1	
	FDD	1 (shared with LPT)	
	SMBUS	1	
	GPIO	8-bit GPIO	
	I²C	1	
Expansion	PCI-104 slot	PCI-104 Expansion	
Power	Power Type	AT/ATX	
	Power Supply Voltage	ATX: +5 V ± 5%, ±12 V ± 5% AT: 5V only to boot up (12 V is optional for LCD inverter and add on card)"	
	Power Consumption (Typical)	5 V	12 V
	Typical	1.90 A	0.07 A
	Suspend	1.36 A	0.06 A
	Power Consumption (Max, test in HCT)	5V: 2.38A	12V: 0.09A
	Power Management	APM1.2, ACPI3.0, wake on LAN, and modem ring-in functions	
	Battery	Lithium 3 V / 210 mAH	
Environment	Operational	0 ~ 60° C (32 ~ 140° F)	
	Non-Operational	Operating: 0 ~ 60° C (32 ~ 140° F) (Operating humidity: 40° C @ 85% RH non-condensing) Non-Operating: -40° C ~ 85° C and 60° C @ 95% RH non-condensing	
Physical Characteristics	Dimensions (L x W)	146 x 102 mm (5.7" x 4")	
	Weight	0.85 kg (1.87 lb), weight of total package	

Board Diagram



Ordering Information

Part No.	CPU	Memory	CRT	LVDS	LVDS2	TTL	LAN	Audio	USB 2.0	RS-232	RS-232/422/485	LPT	KB/MS	Expansion	Thermal Solution	Operating Temp.
PCM-9361FG-S6A1E	Atom N270 1.6G	DIMM	1	-	-	1	1 GE	HD	5	1	1	1	1	PCI-104	Passive	0 ~ 60° C
PCM-9361EG-S6A1E	Atom N270 1.6G	DIMM	1	36-bit	-	-	1 GE	HD	5	1	1	1	1	PCI-104	Passive	0 ~ 60° C
PCM-9361EVG-S6A1E	Atom N270 1.6G	DIMM	1	36-bit	48-bit	-	1 GE	HD	5	1	1	1	1	PCI-104	Passive	0 ~ 60° C
PCM-9361L-S6A1E (W/O cables)	Atom N270 1.6G	DIMM	1	36-bit	-	-	1 GE	HD	5	1	1	1	1	-	Passive	0 ~ 60° C
PCM-9361FZ-1GS6A1E	Atom N270 1.6G	1G bundle	1	-	-	1	1 GE	HD	5	1	1	1	1	PCI-104	Passive	-20 ~ 80° C
PCM-9361VZ-1GS6A1E	Atom N270 1.6G	1Gbundle	1	36-bit	48-bit	-	1 GE	HD	5	1	1	1	1	PCI-104	Passive	-20 ~ 80° C

Packing List

Part No.	Description	Quantity
	PCM-9361 SBC	
	Startup Manual	
	Utility CD	
9689000002	mini Jumper pack	x 1
1700000265	ATX Power Cable	x 1
1700006291	SATA Cable	x 1
1700060202	PS/2 cable	x 1
1701140201	COM2 IDE D-SUB 20 cm cable	x 1
1703100121	USB 2 x 5P-2.0 12 cm W/BKT cable	x 2
1703100152	Audio Cable	x 1
1700260250	LPT IDE 26P D-SUB 25 cm cable	x 1
1703150102	SATA 10 cm power cable	x 1

Optional Accessories

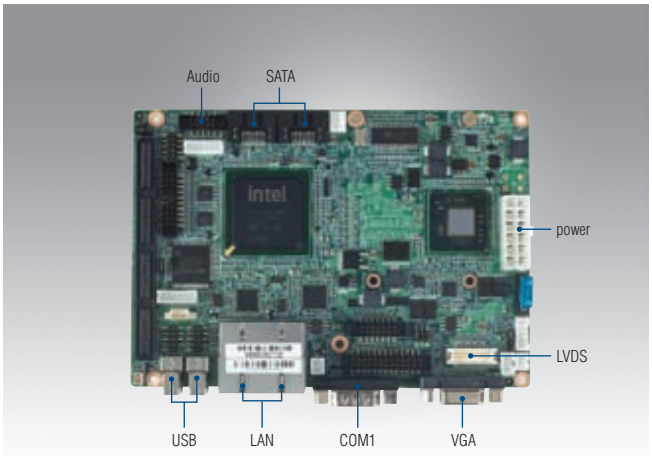
Part No.	Description
1700001531	LPT to FDD cable

Embedded OS

	Part No.	Description
OS	WinCE 6.0	2070008069: Image CE60 Pro PCM-9361 V1.1 JPN
	Win XPE	2070006670: Image XPE FP2007 PCM-9361 V3.01 ENG 2070007911: XPE WES2009 Intel-Mulitprocess V4.0 MUI24 2070007789: XPE WES2009 Intel-Mulitprocess V4.0 ENG
	QNX	2070006929: Image QNX V6.4 PCM-9361 V1.0 ENG
	SUSI	205E936000: EmbCore PCM-9361 3.5" SUSI package V3.08

PCM-9362

Intel® Atom™ N450/ D510 3.5" SBC, LVDS, CRT, 2 Giga LAN, Mini PCIe, 4 COM



Features

- Embedded Intel® Atom™ processor N450 Single Core/ D510 Dual Core 1.66 GHz + ICH8M
- Intel Gen 3.5 DX9, MPEG2 Decode in HW, multiple display: CRT, 18-bit LVDS
- Supports 12 V input power for PCM-9362N/D, 5V input power for PCM-9362NC
- Supports 2 Intel Giga Ethernet ports; Rich I/O interfaces with 4 COM, 2 SATA, 6 USB and GPIO
- Supports embedded software APIs and utilities

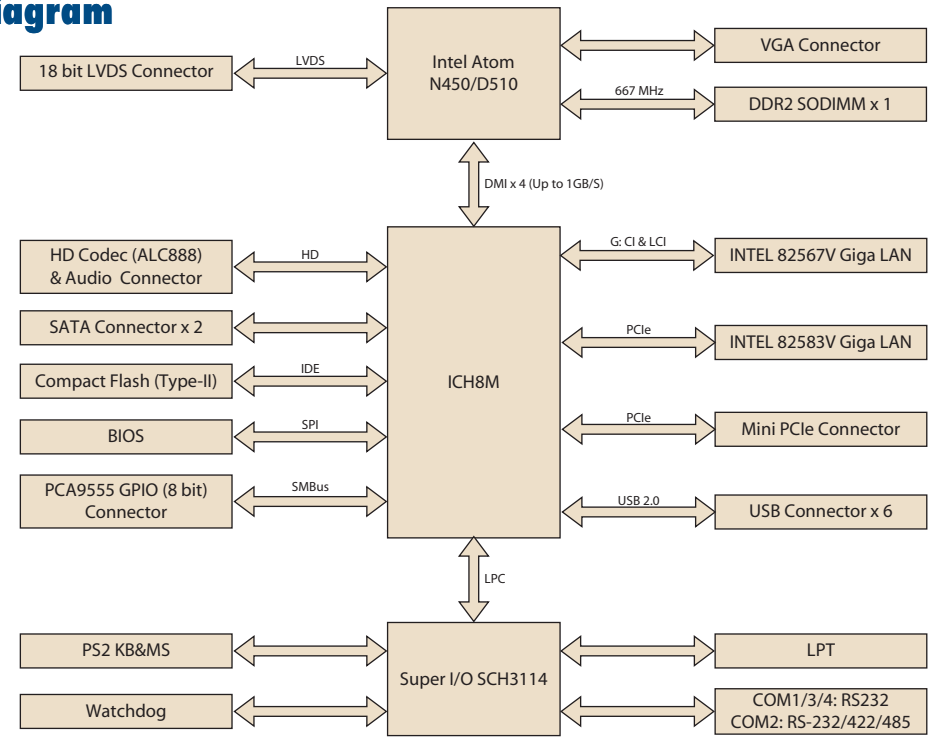
Software APIs: GPIO, H/W Monitor, Brightness, Watchdog, Backlight On/Off, SMBus, CPU Speed, System Throttling

Utilities: BIOS flash, Monitoring, eSOS, Flash Lock, Embedded Security ID

Specifications

Processor System	CPU	Intel Atom Processor, N450 Single Core 1.66 GHz Intel Atom Processor, D510 Dual Core 1.66 GHz
	Front Side Bus	667 MHz
	Frequency	1.66 GHz
	L2 Cache	512 KB/1 MB
	System Chipset	Intel N450/D510 + ICH8M
	BIOS	AMI 16 Mbit Flash BIOS
Memory	Technology	DDR2 667 MHz
	Max. Capacity	2 GB
	Socket	1 x 200-pin SODIMM
Display	Chipset	Intel Atom N450/D510 1.66 GHz
	VRAM	Optimized Shared Memory Architecture up to 224 MB system memory
	Graphics Engine	Intel Gen 3.5 DX9, MPEG2 Decode in HW Embedded Gen3.5+ GFX Core
	LVDS	LVDS: Single channel 18-bit LVDS up to WXGA 1366 x 768
	VGA	Intel Atom N450 Single Core up to 1400 x 1050 (SXGA) Intel Atom D510 Dual Core up to 2048 x 1536
	Dual Display	CRT+LVDS
Ethernet	Speed	10/100/1000 Mbps
	Controller	LAN1 Intel 82567V Giga LAN LAN2 Intel 82583V Giga LAN
	Connector	RJ-45 on LAN1,LAN2
Audio	Chipset	Realtek ALC888, High Definition Audio(HD),Line-in, Line out, Mic-in
WatchDog Timer		Output System reset, Programmable 1 ~ 255 sec
Storage	CompactFlash	Supports CompactFlash Card TYPE I/II (Primary Master IDE Channel)
	SATA	2
Rear I/O	Serial	1 (COM1 supports RS-232)
	Ethernet	2 (10/100/1000 Mbps)
	VGA	1
	USB	2
Internal I/O	USB	4 x USB 2.0 ports
	Serial	3 x COM ports COM3/COM4 supports RS-232 COM2 supports RS-232/422/485
	Parallel (LPT)	1
	KB/Mouse	1
	GPIO	8-bit GPIO
	I²C	1
Expansion	Mini PCI Express	1
	MIO 160	1 (Optional by request)
Power	Power Type	AT/ATX
	Power Supply Voltage	AT: 5 V or 12 V, ATX: 5 V, 5 V sb (12 V is optional for LCD inverter and add on card) AT: 12 V, ATX: 12 V, 5 V sb
	Power Consumption (Typical)	PCM-9362NC-S6A1E: 5 V : 2.31 A PCM-9362N-S6A1E: 12 V : 0.87 A PCM-9362D-S6A1E: 12 V : 0.91 A
	Power Consumption (Max, test in HCT)	PCM-9362NC-S6A1E: 5 V : 2.36 A PCM-9362N-S6A1E: 12 V : 1.01 A PCM-9362D-S6A1E: 12 V : 1.17 A
	Power Management	APM, ACPI
	Battery	Lithium 3 V/210 mAH
Environment	Operational	0 ~ 60° C (32 ~ 140° F)
	Non-Operational	Operating: 0 ~ 60° C (32 ~ 140° F) (Operating humidity: 40° C @ 85% RH non-condensing) Non-Operating: -40° C ~ 85° C and 60° C @ 95% RH non-condensing
Physical Characteristics	Dimensions (L x W)	146 x 102 mm (5.7" x 4")
	Weight	0.85 kg (1.87 lb), weight of total package

Board Diagram



Ordering Information

Model	CPU	Power Input	CRT	LVDS	Giga LAN1	Giga LAN2	Audio	SATAII	USB 2.0	Mini-PCIe	CF	LPT	RS-232	RS-232/422/485	Thermal Solution	Operating Temperature
PCM-9362NC-S6A1E	Atom N450	5 V	1	1	Yes	Yes	HD	2	6	1	1	1	3	1	Passive	0 ~ 60° C
PCM-9362N-S6A1E	Atom N450	12 V	1	1	Yes	Yes	HD	2	6	1	1	1	3	1	Passive	0 ~ 60° C
PCM-9362D-S6A1E	Atom D510	12 V	1	1	Yes	Yes	HD	2	6	1	1	1	3	1	Active	0 ~ 60° C
PCM-9362NZ-1GS6A1E	Atom N450	12 V	1	1	Yes	Yes	HD	2	6	1	1	1	3	1	Passive	-20 ~ 80° C

Packing List

Part No.	Description	Quantity
	PCM-9362 SBC	
	Startup Manual	
	Utility CD	
9689000002	mini Jumper pack	x 1
1700000265	ATX Power Cable	x 1
1700006291	SATA Cable	x 1
1703060191	PS/2 cable	x 1
1701140201	COM2 IDE D-SUB 20 cm cable	x 1
1703100121	USB 2 x 5P-2.0 12 cm W/BKT cable	x 2
1703100152	Audio Cable	x 1
1700260250	LPT IDE 26P D-SUB 25 cm cable	x 1
1703150102	SATA 10 cm Power cable	x 1

Optional Accessories

(MIO interface is optional by request)

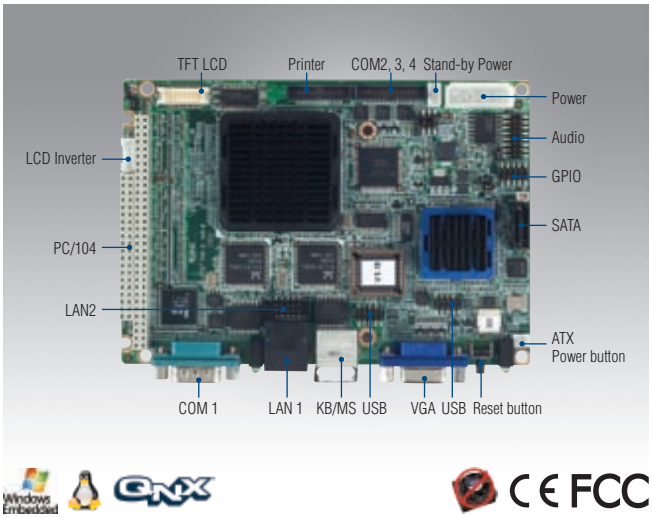
Part No.	Description
MIO-6254	MIO module w/DVI, S-Video, Audio
MIO-6255	MIO module w/2 x Cardbus
MIO-6260	MIO module w/4 x USB, 2 x COM, 1 x LAN

Embedded OS

	Part No.	Description
OS	Win XPE	2070009030: XPE WES2009 Luna Pier V4.0 ENG 2070009031: XPE WES2009 Luna Pier V4.0 MUI24
	SUSI	205E362010: SUSI 3.0 SW API for PCM-9362 B: 20091117 XP

PCM-9375

AMD Geode™ LX800 3.5" SBC, CRT, LVDS, LCD, 2 LAN, IDE, SATA, PC/104



Features

- AMD Geode™ low power LX800 500 MHz processor
- 24-bit TFT LCD interface, 18-bit LVDS LCD display
- Dual 10/100 Mbps Fast Ethernet
- Supports up to 4 COM ports, 4 USB ports, PC/104 expansion
- Supports embedded software APIs and utilities

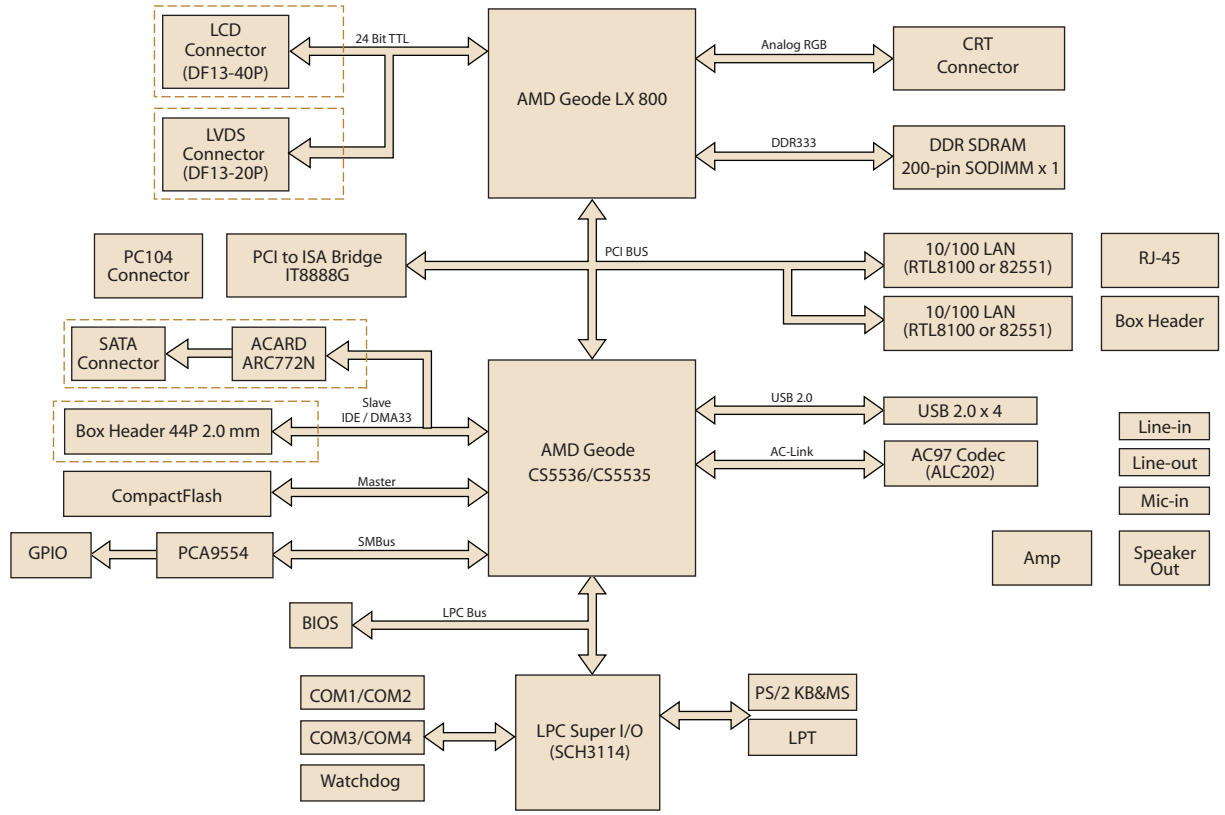
Software APIs: GPIO, H/W Monitor, Watchdog, Brightness, SMBus, Backlight On/Off

Utilities: BIOS flash, Monitoring

Specifications

Processor System	CPU	AMD Geode™ LX800 processor, up to 500 MHz
	Frequency	500 MHz
	L2 Cache	128 KB
	System Chipset	AMD Geode LX800
	BIOS	Award 4 Mb Flash ROM BIOS
Memory	Technology	DDR 333/400 MHz
	Max. Capacity	512 MB (1 GB optional)
	Socket	1 x 200-pin SODIMM
Display	Chipset	AMD Geode LX800
	VRAM	Optimized shared memory architecture up to 64 MB system memory
	Graphics Engine	AMD CS5536 2D engine
	LVDS	1 x 18-bit LVDS (PCM-9375E), up to 1600 x 1200 x 32 bpp at 60 Hz
	VGA	CRT: up to 1920 x 1440 @ 32 bpp (85 Hz)
	TTL LCD	1 x 24-bit TTL (PCM-9375F), up to 1600 x 1200 x 32 bpp at 60 Hz
	Dual Display	CRT+TTL, CRT+LVDS
Ethernet	Speed	10/100 Mbps
	Controller	LAN1 Realtek RTL8100 10/100 Mbps LAN LAN2 Realtek RTL8100 10/100 Mbps LAN
	Connector	RJ-45 on LAN1, box header on LAN2
Audio	Chipset	Realtek ALC203 AC97, Line-in, Line-out, Mic-in
WatchDog Timer		Output system reset Programmable 1 ~ 255 sec
Storage	CompactFlash	1
	SATA	1
	IDE	1
	Floppy	1 (share withLPT)
Rear I/O	Serial	1 (COM1 supports RS-232)
	Ethernet	1 (10/100 Mbps)
	KB/Mouse	1
	VGA	1
	Reset Button	1
Internal I/O	USB	4 x USB 2.0
	Serial	3 x COM COM3/COM4 supports RS-232 COM2 supports RS-232/422/485
	IDE	1 UDMA 33/66
	Parallel (LPT)	1 (share with LPT)
	FDD	1 (share with LPT)
	GPIO	8-bit GPIO
	I²C	optional
Expansion	PC/104 Slot	PC/104 Expansion(8/16-Bit ISA)
Power	Power Type	AT/ATX
	Power Supply Voltage	5V + 5%, 12V + 5% (LCD, PC/104)
	Power Consumption (Typical)	Typical: 0.6 A @ 5 V, 0.03 A @ 12 V
	Power Consumption (Max, test in HCT)	MAX: 1.2 A @ 5 V, 0.23 A @ 12 V
	Power Management	APM 1.2, ACPI
	Battery	Lithium 3 V/196 mAH
Environment	Operational	0 ~ 60° C (32 ~ 140° F)
	Non-Operational	Operating: 0 ~ 60° C (32 ~ 140° F) (Operating humidity: 40° C @ 85% RH non-condensing) Non-Operating: -40° C ~ 85° C and 60° C @ 95% RH non-condensing
Physical Characteristics	Dimensions (L x W)	146 x 102 mm (5.7" x 4")
	Weight	0.85 kg (1.87 lb), weight of total package

Board Diagram



Ordering Information

Part No.	CPU	CRT	LVDS	TTL	LAN	IDE/SATA	USB2.0	RS-232	RS-232/422/485	LPT	GPIO	CF	PC/104	Thermal Solution	Operating Temp.
PCM-9375F-J0A1E	AMD LX800	1	-	1	2 FE	1 IDE	4	3	1	1	8-bit	1	1	Passive	0 ~ 60° C
PCM-9375E-J0A1E	AMD LX800	1	1	-	2 FE	1 IDE	4	3	1	1	8-bit	1	1	Passive	0 ~ 60° C
PCM-9375SF-J0A1E	AMD LX800	1	-	1	2 FE	1 SATA	4	3	1	1	8-bit	1	1	Passive	0 ~ 60° C
PCM-9375SE-J0A1E	AMD LX800	1	1	-	2 FE	1 SATA	4	3	1	1	8-bit	1	1	Passive	0 ~ 60° C
PCM-9375FZ-J0A1E	AMD LX800	1	-	1	2 FE	1 IDE	4	3	1	1	8-bit	1	1	Passive	-20 ~ 80° C
PCM-9375EZ-J0A1E	AMD LX800	1	1	-	2 FE	1 IDE	4	3	1	1	8-bit	1	1	Passive	-20 ~ 80° C
PCM-9375FZ2-J0A1E	AMD LX800	1	-	1	2 FE	1 IDE	4	3	1	1	8-bit	1	1	Passive	-40 ~ 85° C
PCM-9375EZ2-J0A1E	AMD LX800	1	1	-	2 FE	1 IDE	4	3	1	1	8-bit	1	1	Passive	-40 ~ 85° C

Packing List

Part No.	Description	Quantity
	PCM-9375 SBC	
	Startup Manual	
	Utility CD	
1701440351	IDE cable (44p/44p)	x 1
1700060202	KB/MS cable	x 1
1701100202	LAN cable	x 1
1700001971	COM 2/3/4 RS-232 cable	x 1
1700260250	Parallel Port cable	x 1
1703160160	Audio cable	x 1
1703100121	USB cable (2 ports)	x 1

Optional Accessories

Part No.	Description
1703040157	COM2 cable for RS-422/485
1703200201	ATX power control cable

Floppy Disk Module

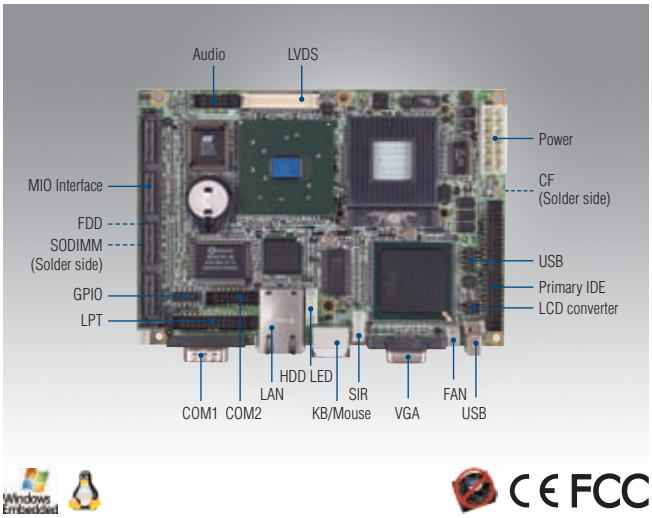
Part No.	Description
9696937580E	PCM-9375-FDD module
1701340700	Flat cable 34-pin for FDD
1700016261	2 x LPT cable 2 LPT 1.27 mm

Embedded OS

	Part No.	Description
OS	WinCE 5.0	2070000729: Image PCM-9375 CE 5.0 Pro Plus Eng
	WinCE 6.0	2070001612: CE60 Pro GX3 4Com V1.0 ENG 2070007509: CE 6.0 Pro PCM-9375_4COM V1.1 JPN 2070007810: CE60 Pro GX3 4COM V1.2 ENG
	Win XPE	2070000732: Win XPe SP2 for PCM-9375 V2.10, English version (430 MB) 2070001576: XPE FP2007 GX3(LX800) V3.0 ENG
	SUSI	2066002300: CD SUSI Library V1.0
	QNX	QNX 6.3.2 QNX 6.4.1
	Linux	205E375000: Linux WDT Driver Ubuntu8.04 PCM-9375 V1.0 ENG

PCM-9380

Intel® Pentium® M Processor 3.5" SBC, CRT, LVDS, LAN, USB, MIO



Features

- Supports Intel Pentium® M/ Celeron® M processor (Socket 478 type)
- Supports ECC DDR 266/333 MHz memory
- 2-channel LVDS supports up to 48-bit (optional), dual independent display (CRT + LVDS)
- +5 V and +12 V power; or single +5 V power
- Supports Embedded Software APIs and Utilities

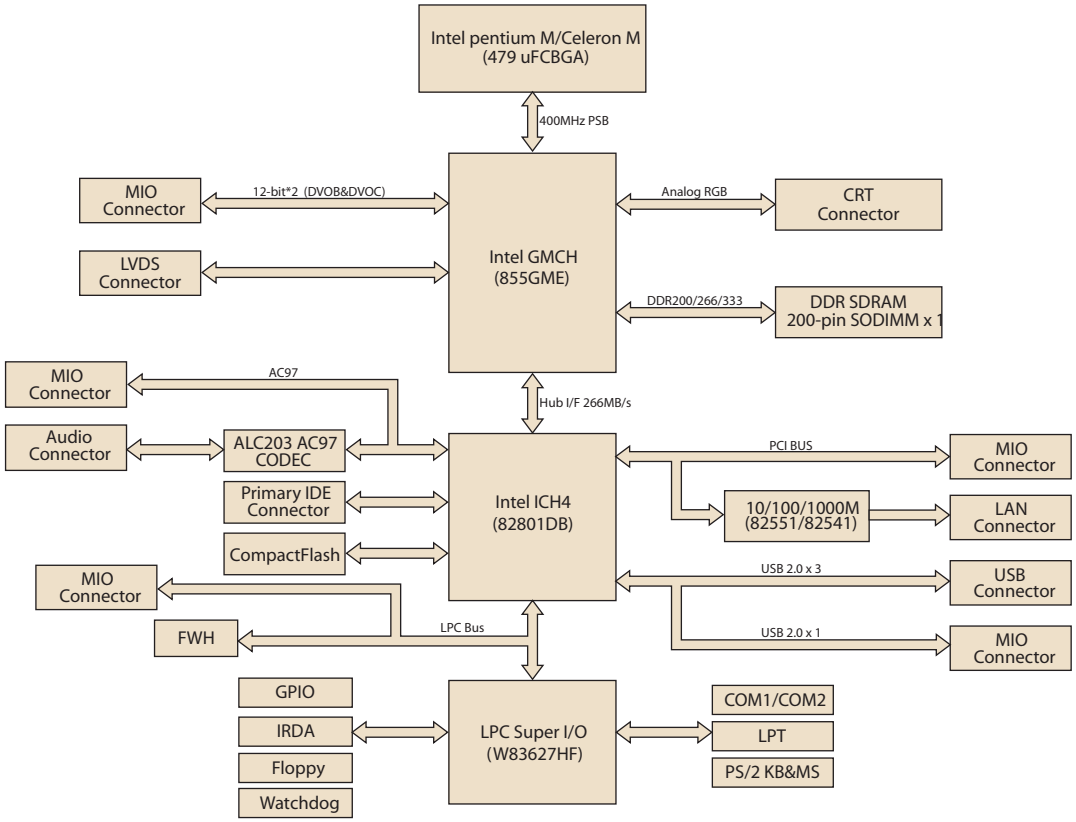
Software APIs: GPIO, H/W Monitor, Watchdog, Backlight On/Off, SMBus, CPU Speed, System Throttling

Utilities: BIOS flash, Monitoring

Specifications

Processor System	CPU	Intel Pentium M/Celeron M socket 478 type
	Front Side Bus	400 MHz
	Frequency	Depends on processor
	System Chipset	Intel 855GME + ICH4
	BIOS	Award 4 Mb Flash ROM BIOS
Memory	Technology	DDR 200/266/333 MHz SO-DIMM supported
	Max. Capacity	1 GB
	Socket	1 x 200-pin SODIMM
Display	Chipset	Intel 855GME
	VRAM	Optimized shared memory architecture up to 64 MB system memory
	Graphics Engine	Mobile Intel 855 GME integrated 3D/2D engine
	LVDS	1 x 36-bit LVDS (48-bit optional)
	VGA	CRT: up to 1600 x 1200 @ 32bpp (85 Hz)
	TV Out	Optional with MIO-6254 module
	Dual Display	CRT + LVDS CRT + TV-out / LVDS + TV-out (w/MIO-6254)
Ethernet	Speed	10/100 Mbps 10/100/1000 Mbps (optional)
	Controller	Intel 82551QM 10/100 Mbps LAN Intel 82541PI 10/100/1000 Mbps Giga LAN(Optional)
	Connector	RJ-45 on LAN
Audio	Chipset	Realtek ALC203 AC97, Line-in, Line-out, Mic-in
WatchDog Timer		Output System reset Programmable 1 ~ 255 sec
Storage	CompactFlash	1
	IDE	1
	Floppy	1
Rear I/O	Serial	1 (COM1 supports RS-232)
	Ethernet	1 (10/100 Mbps)
	KB/Mouse	1
	VGA	1
	USB	1
Internal I/O	USB	2 x USB 2.0
	Serial	1 x COM COM2 supports RS-232/422/485
	IDE	1
	Parallel(LPT)	1
	FDD	1
	SMBUS	Supported
	KB/Mouse	1
	GPIO	8-bit GPIO
	IrDA	115 kbps, SIR, IrDA 1.0 complaint
Expansion	MIO 160	1
Power	Power Type	AT/ATX
	Power Supply Voltage	5V + 5%, 12V + 5% (LCD)
	Power Consumption (Typical)	Typical: 3.0 A @ 5 V, 0.04 A @ 12 V (Pentium M 1.8 G, DDR266/256 MB)
	Power Consumption (Max, test in HCT)	MAX: 4.26 A @ 5 V, 0.13 A @ 12 V (Pentium M 1.8 G, DDR266/256 MB)
	Power Management	APM1.2, ACPI2.0, wake on LAN, and modem ring-in functions
	Battery	Lithium 3 V/196 Mah
Environment	Operational	0 ~ 60° C (32 ~ 140° F)
	Non-Operational	Operating: 0 ~ 60° C (32 ~ 140° F) (Operating humidity: 40° C @ 85% RH non-condensing) Non-Operating: -40° C ~ 85° C and 60° C @ 95% RH non-condensing
Physical Characteristics	Dimensions (L x W)	146 x 102 mm (5.7" x 4")
	Weight	0.85 kg (1.87 lb), weight of total package

Board Diagram



Ordering Information

Part No.	CPU	CRT	LVDS	DVI	TV Out	LAN	USB	RS-232	RS-232/422/485	LPT	GPIO	IrDA	CF	MIO	Thermal Solution	Operating Temp.
PCM-9380F-00A3E	Socket	1	1	-	-	1 FE	3	1	1	1	4 in, 4 out	1	1	1	Passive	0 ~ 60° C
PCM-9380F-M0A3E	Celeron M 600 MHz (512 KB)	1	1	-	-	1 FE	3	1	1	1	4 in, 4 out	1	1	1	Passive	0 ~ 60° C
PCM-9380F-S0A3E	Celeron M 1.0 GHz	1	1	-	-	1 FE	3	1	1	1	4 in, 4 out	1	1	1	Passive	0 ~ 60° C
PCM-9380FG-00A3E	Socket	1	1	-	-	1GbE	3	1	1	1	4 in, 4 out	1	1	1	Passive	0 ~ 60° C
PCM-9380FG-S0A3E	Celeron M 600 MHz (512 KB)	1	1	-	-	1GbE	3	1	1	1	4 in, 4 out	1	1	1	Passive	0 ~ 60° C

Packing List

Part No.	Description	Quantity
	PCM-9380 SBC	
	Startup Manual	
	Utility CD	
1701440351	IDE cable (44p/44p)	x 1
1700060202	KB/MS cable	x 1
1701140201	RS-232/RS-422/485 cable	x 1
1700260250	Parallel Port cable	x 1
1703100152	Audio cable	x 1
1703100121	USB cable (2 ports)	x 1
9681000044	26-34 pin FDD Adapter	x 1
1701340700	Flat Cable 34-pin for FDD	x 1
1700000265	ATX power 20P-12P cable	x 1

Optional Accessories

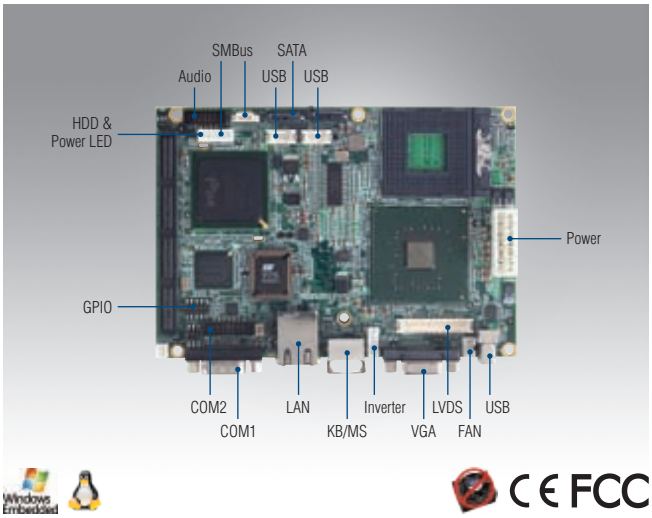
Part No.	Description
MIO-6250-00A1E	MIO Module w/ 3 LAN, RoHS
MIO-6254-00A1E	MIO module w/ DVI, TV, Audio
MIO-6260-00A1E	MIO module w/ 2 COM, 4 USB, RoHS

Embedded OS

	Part No.	Description
OS	WinCE 5.0	2070000765: Image CE 5.0 Pro Plus EN for P-M with 2 COM
	WinCE 6.0	2070001580: CE60 Pro P-M (852/855) 2Com V1.0 ENG
	Win XPE	2070000733: Image XPE SP2 (P-4_P-M Boards) V2.20 (ENG) (450 MB) 2070001573: XPE FP2007 P4&PM-A (to 915) V3.0 ENG

PCM-9382

Intel® Core™2 Duo Processor 3.5" SBC, CRT, LVDS, LAN, USB, SATA, SSD



Features

- Embedded Intel® Core™2/Core™ Duo processor LV/ ULV
- Supports 48-bit LVDS/ VGA display
- Supports Giga LAN and HD audio
- Supports five USB 2.0 ports and one SATA II
- Supports embedded software API and utility

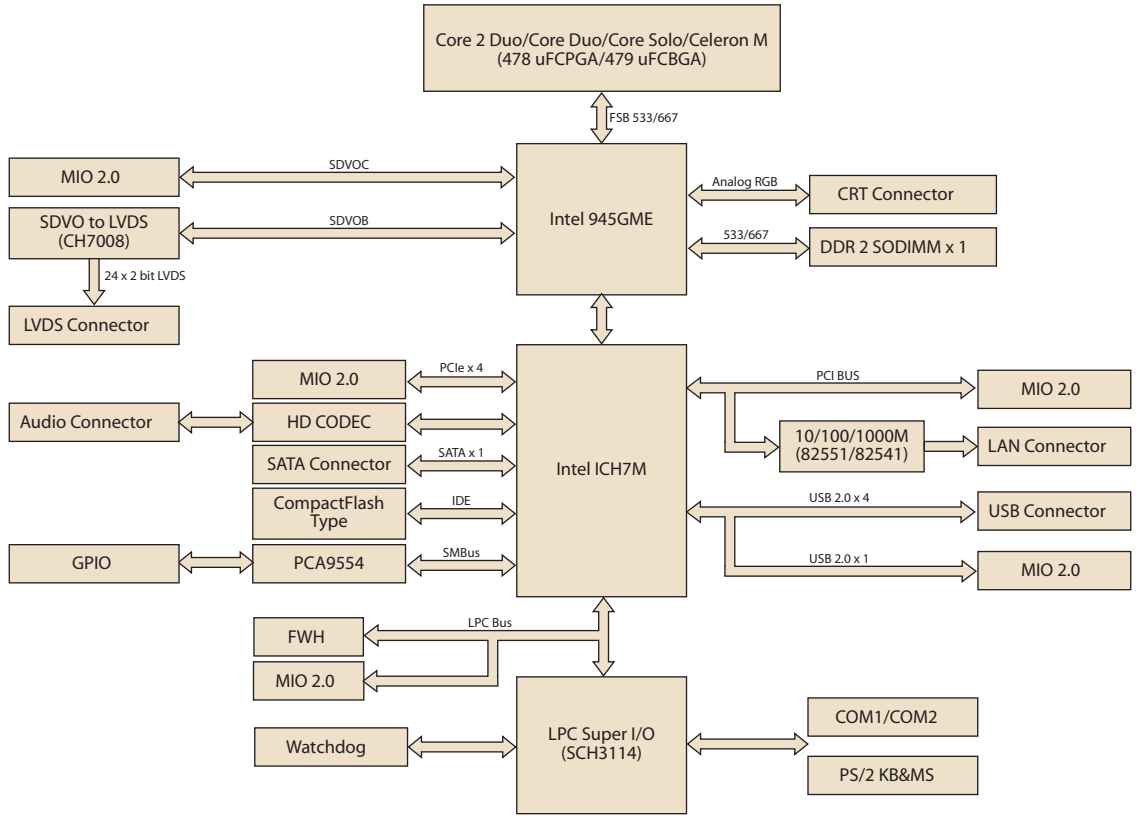
Software APIs: GPIO, H/W Monitor, Watchdog, Backlight On/Off, SMBus, CPU Speed, System Throttling

Utilities: BIOS flash, Monitoring

Specifications

Processor System	CPU	Intel Core 2 Duo/Core Duo/Core Solo FSB667 MHz socket 478 type, up to Intel Core 2 Duo T74000 Intel Celeron M 1.06 GHz (423) Onboard CPU
	Front Side Bus	533/667 MHz
	Frequency	Depends on processor
	System Chipset	Intel 945GME + ICH7M
	BIOS	Award 4 Mb Flash ROM BIOS
Memory	Technology	DDRII 533/667 MHz SO-DIMM
	Max. Capacity	2 GB
	Socket	1 x 200-pin SODIMM
Display	Chipset	Intel 945GME
	VRAM	DVMT 4.0 supports up to 224 MB
	Graphics Engine	Mobile Intel GMA 950 3D/2D engine
	LVDS	1 x 48-bit LVDS
	VGA	CRT: up to 2048 x 1536 @ 32bpp (85 Hz)
	Dual Display	CRT + LVDS
Ethernet	Speed	10/100 Mbps
	Controller	Intel 82551QM 10/100 Mbps LAN Intel 82541PI 10/100/1000 Mbps Giga LAN (Optional)
	Connector	RJ-45 on LAN
Audio	Chipset	Realtek ALC888, High Definition Audio (HD), Line-in, Line out, Mic-in
WatchDog Timer		Output System reset Programmable 1 ~ 255 sec
Storage	CompactFlash	1
	SATA	1 (150 MB/s)
Rear I/O	Serial	1 (COM1 supports RS-232)
	Ethernet	1 (10/100 Mbps)
	KB/Mouse	1
	VGA	1
	USB	1
Internal I/O	USB	4 x USB 2.0
	Serial	1 x COM COM2 supports RS-232/422/485
	SMBUS	Supported
	KB/Mouse	1
	GPIO	8-bit GPIO
Expansion	MIO 160	1
Power	Power Type	AT/ATX
	Power Supply Voltage	5V + 5%, 12V + 5% (LCD)
	Power Consumption (Typical)	Typical: 4.64 A @ 5 V, 0.09 A @ 12 V (Core Duo 2.16 G/DDRII 533/512 MB)
	Power Consumption (Max, test in HCT)	MAX: 5.14 A @ 5 V, 0.15 A @ 12 V (Core Duo 2.16 G/DDRII 533/512 MB)
	Power Management	APM1.2, ACPI2.0, wake on LAN, and modem ring-in functions
	Battery	Lithium 3 V / 210 Mah
Environment	Operational	0 ~ 60° C (32 ~ 140° F)
	Non-Operational	Operating: 0 ~ 60° C (32 ~ 140° F) (Operating humidity: 40° C @ 85% RH non-condensing) Non-Operating: -40° C ~ 85° C and 60° C @ 95% RH non-condensing
Physical Characteristics	Dimensions (L x W)	146 x 102 mm (5.7" x 4")
	Weight	0.85 kg (1.87 lb), weight of total package

Board Diagram



Ordering Information

Part No.	CPU	CRT	LVDS	LAN	SATA	USB	RS-232	RS-232/422/485	CF	MIO	Power Supply	Thermal Solution	Operating Temp.
PCM-9382F-00A1E	Socket	1	1	1 FE	1	5	1	1	1	1	5 V/12 V	Active	0 ~ 60° C
PCM-9382F-S0A1E	1.06 GHz	1	1	1 FE	1	5	1	1	1	1	5 V or 5 V/12 V	Passive	0 ~ 60° C
PCM-9382FG-00A1E	Socket	1	1	1 GbE	1	5	1	1	1	1	5 V/12 V	Active	0 ~ 60° C

Packing List

Part No.	Description	Quantity
	PCM-9382 SBC	
	Startup Manual	
	Utility CD	
1700006291	SATA cable	x 2
1700060202	KB/MS cable	x 1
1701140201	RS-232/422/485 cable	x 1
1703100152	Audio cable	x 1
1700006292	USB cable (2 ports)	x 1
1750001940	Cooler (Socket type CPU using)	x 1

Optional Accessories

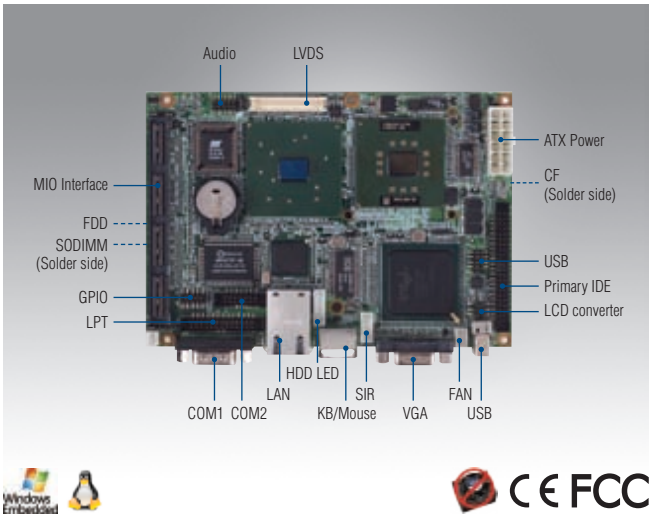
Part No.	Description
MIO-6255-00A1E	MIO Module w/ 2 Cardbus
MIO-6260-00A1E	MIO Module w/ 2 COM, 4 USB, RoHS

Embedded OS

	Part No.	Description
OS	Win XPE	2070001575: XPE FP2007 P4&PM-B (from 945) V3.0 ENG

PCM-9386

Intel® Celeron® M processor ULV 3.5" SBC, CRT, LVDS, LAN, USB, MIO



Features

- Embedded Intel® Celeron® M processor ULV 600 MHz and 1.0 GHz
- Supports DDR 266 MHz memory
- Supports 36-bit LVDS (48-bit LVDS optional)/CRT, supports dual independent display
- 100 Mbps Ethernet; Gigabit Ethernet (optional)
- Supports embedded software APIs and utilities

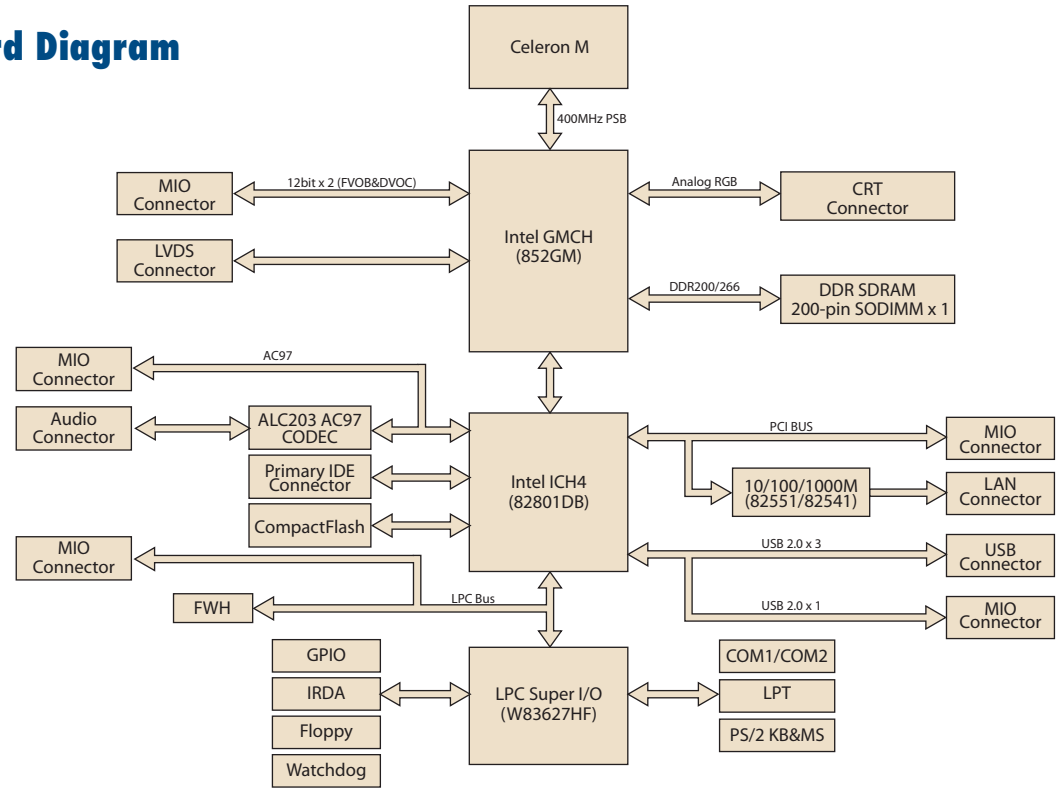
Software APIs: GPIO, H/W Monitor, Watchdog, Backlight On/Off, SMBus, CPU Speed, System Throttling

Utilities: BIOS flash, Monitoring

Specifications

Processor System	CPU	Intel Celeron M 600 MHz and 1.0 GHz on board type
	Front Side Bus	400 MHz
	Frequency	600 MHz and 1.0 GHz
	L2 Cache	512 KB on 600 MHz, 0L2 on 1 GHz
	System Chipset	Intel 852GM + ICH4
	BIOS	Award 4 Mb Flash ROM BIOS
Memory	Technology	DDR200/266 MHz SO-DIMM supported
	Max. Capacity	1 GB
	Socket	1 x 200-pin SODIMM
Display	Chipset	Intel 852GM
	VRAM	Optimized shared memory architecture up to 64 MB system memory
	Graphics Engine	Mobile Intel 852GM integrated 3D/2D engine
	LVDS	1 x 36-bit LVDS (48-bit optional)
	VGA	CRT: up to 1600 x 1200 @32bpp(85Hz)
	TV Out	Optional with MIO-6254 module
	Dual Display	CRT + LVDS CRT + TV-out / LVDS + TV-out (w/MIO-6254)
Ethernet	Speed	10/100 Mbps 10/100/1000 Mbps (optional)
	Controller	Intel 82551QM 10/100 Mbps LAN Intel 82541PI 10/100/1000 Mbps Giga LAN (Optional)
	Connector	RJ-45 on LAN
Audio	Chipset	Realtek ALC203 AC97, Line-in, Line-out, Mic-in
WatchDog Timer		Output System reset, Programmable 1 ~ 255 sec
Storage	CompactFlash	1
	IDE	1
	Floppy	1
Rear I/O	Serial	1 (COM1 supports RS-232)
	Ethernet	1 (10/100 Mbps)
	KB/Mouse	1
	VGA	1
	USB	1
Internal I/O	USB	2 x USB 2.0
	Serial	1x COM COM2 supports RS-232/422/485
	IDE	1
	Parallel(LPT)	1
	FDD	1
	SMBUS	Supported
	KB/Mouse	1
	GPIO	8-bit GPIO
	IrDA	115 kbps, SIR, IrDA 1.0 complaint
Expansion	MIO 160	1
Power	Power Type	AT/ATX
	Power Supply Voltage	5V + 5%, 12V + 5% (LCD)
	Power Consumption (Typical)	Typical: 2.0 A @ 5 V, 0.02 A @ 12 V (Celeron M 600, DDR266/256 MB)
	Power Consumption (Max, HCT)	MAX: 2.0 A @ 5 V, 0.02 A @ 12 V (Celeron M 600, DDR266/256 MB)
	Power Management	APM1.2, ACPI2.0, wake on LAN, and modem ring-in functions
	Battery	Lithium 3 V / 196 Mah
Environment	Operational	0 ~ 60° C (32 ~ 140° F)
	Non-Operational	Operating: 0 ~ 60° C (32 ~ 140° F) (Operating humidity: 40° C @ 85% RH non-condensing) Non-Operating: -40° C ~ 85° C and 60° C @ 95% RH non-condensing
Physical Characteristics	Dimensions (L x W)	146 x 102 mm (5.7" x 4")
	Weight	0.85 kg (1.87 lb), weight of total package

Board Diagram



Ordering Information

Part No.	CPU	CRT	LVDS	LAN	USB	RS-232	RS-232/422/485	LPT	GPIO	IrDA	CF	MIO	Thermal Solution	Operating Temp.
PCM-9386F-M0A3E	Celeron M 600 MHz (512 KB)	1	1	1 FE	3	1	1	1	4 in, 4 out	optional	1	1	Passive	0 ~ 60° C
PCM-9386F-S0A3E	Celeron M 1 GHz (0 KB)	1	1	1 FE	3	1	1	1	4 in, 4 out	optional	1	1	Passive	0 ~ 60° C
PCM-9386FG-S0A3E	Celeron M 1 GHz (0 KB)	1	1	1 GbE	3	1	1	1	4 in, 4 out	optional	1	1	Passive	0 ~ 60° C

Packing List

Part No.	Description	Quantity
	PCM-9380 SBC	
	Startup Manual	
	Utility CD	
1701440351	IDE cable (44p/44p)	x 1
1700060202	KB/MS cable	x 1
1701140201	RS-232/RS-422/485 cable	x 1
1700260250	Parallel Port cable	x 1
1703100152	Audio cable	x 1
1703100121	USB cable (2 ports)	x 1
9681000044	26-34 pin FDD Adapter	x 1
1701340700	Flat Cable 34-pin for FDD	x 1
1700000265	ATX power 20P-12P cable	x 1

Optional Accessories

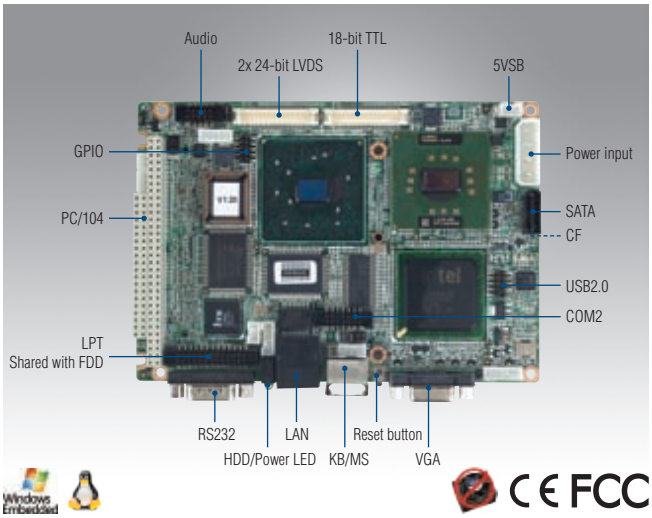
Part No.	Description
MIO-6250-00A1E	MIO module w/ 3 LAN, RoHS
MIO-6254-00A1E	MIO module w/ DVI, TV, Audio
MIO-6260-00A1E	MIO module w/ 2 COM, 4 USB, RoHS

Embedded OS

	Part No.	Description
OS	WinCE 5.0	2070000765: Image CE 5.0 Pro Plus EN for P-M with 2 COM
	WinCE 6.0	2070001580: CE60 Pro P-M (852/855) 2 Com V1.0 ENG
	Win XPE	2070000733: Image XPE SP2(P-4_P-M Boards V2.20 (ENG) (450 MB) 2070001573: XPE FP2007 P4&PM-A (to 915) V3.0 ENG

PCM-9388

Intel® Celeron® M Processor ULV 3.5" SBC, CRT, LCD, LAN , USB, PC/104



Features

- Supports Intel® Celeron® M processor
- Supports 18-bit TTL/36-bit LVDS (48-bit LVDS optional)/ CRT Dual independent display by CRT + LVDS/CRT + TTL
- Fanless support with low profile heatsink
- Full LCD support for 18-bit TTL/2-chanel LVDS supports up to 48-bit (Optional)
- Supports embedded software APIs and utilities

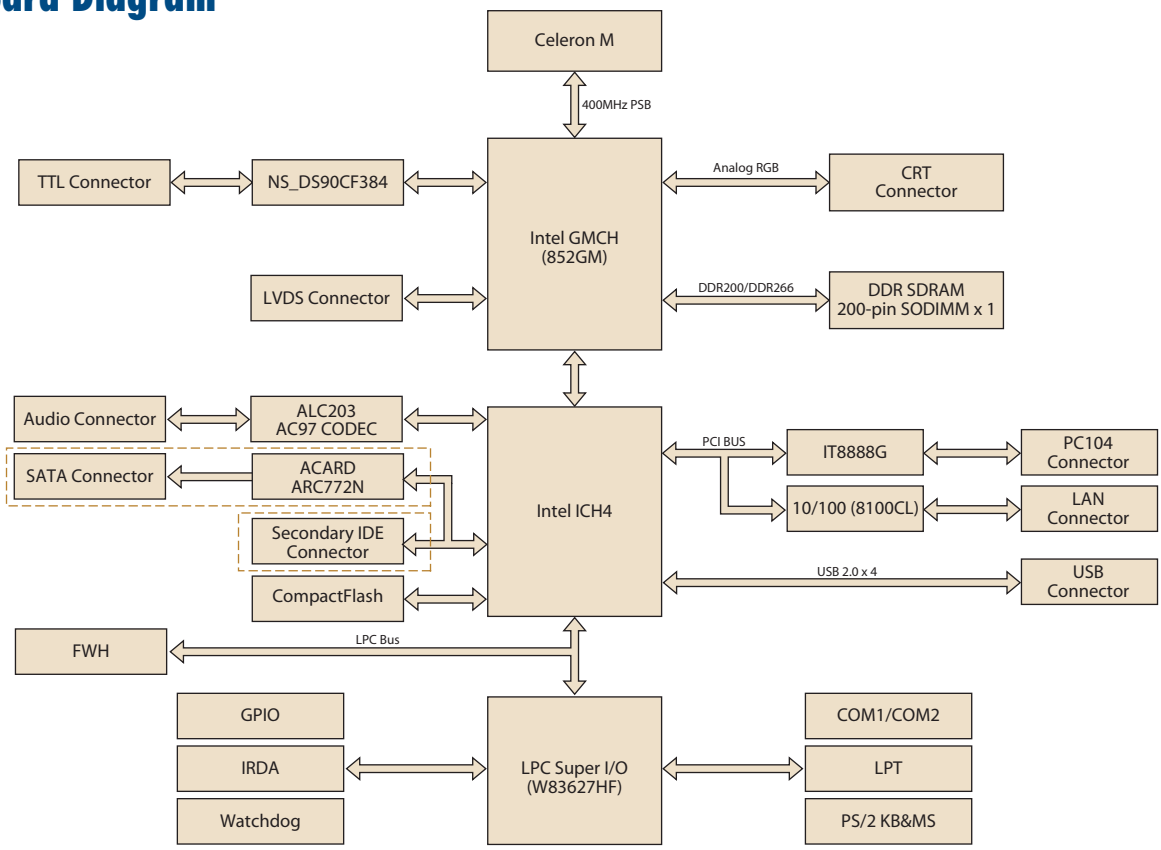
Software APIs: GPIO, H/W Monitor, Watchdog, Backlight On/Off, SMBus, CPU Speed, System Throttling

Utilities: BIOS flash, Monitoring

Specifications

Processor System	CPU	Intel Celeron M 600 MHz and 1.0 GHz on board type
	Front Side Bus	400 MHz
	Frequency	600 MHz and 1.0 GHz
	L2 Cache	512 KB on 600 MHz, 0L2 on 1.0 GHz
	System Chipset	Intel 852GM + ICH4
	BIOS	Award 4 Mb Flash ROM BIOS
Memory	Technology	DDR266 MHz SO-DIMM supports
	Max. Capacity	1 GB
	Socket	1 x 200-pin SODIMM
Display	Chipset	Intel 852 GM
	VRAM	Supports 64 MB frame buffer share system memory
	Graphics Engine	Mobile Intel 852 GM integrated 3D/2D engine
	LVDS	1 x 36-bit LVDS (48-bit optional)
	VGA	CRT: up to 1600 x 1200 @ 32 bpp (85 Hz)
	TTL LCD	1 x 18-bit TTL
	Dual Display	CRT + TTL, CRT + LVDS
Ethernet	Speed	10/100 Mbps
	Controller	Realtek RTL 8100CL
	Connector	RJ-45 on LAN
Audio	Chipset	Realtek ALC203 AC97, Line-in, Line-out, Mic-in
WatchDog Timer		Output System reset Programmable 1 ~ 255 sec
Storage	CompactFlash	1
	SATA	1 (only for PCM-9388S)
	IDE	1 (only for PCM-9388F)
	Floppy	1 (share with LPT)
Rear I/O	Serial	1 (COM1 supports RS-232)
	Ethernet	1 (10/100 Mbps)
	KB/Mouse	1
	VGA	1
	Reset Button	1
Internal I/O	USB	2 x USB 2.0
	Serial	1 x COM COM2 supports RS-232/422/485
	IDE	1 UDMA 33 (only for PCM-9388F)
	Parallel(LPT)	1 (share with FDD)
	FDD	1 (share with LPT)
	SMBUS	Supported
	GPIO	8-bit GPIO
	IrDA	115 kbps
Expansion	PC/104 Slot	PC/104 Expansion(8/16-Bit ISA)
Power	Power Type	AT/ATX
	Power Supply Voltage	5V + 5%, 12V + 5% (LCD)
	Power Consumption (Typical)	Typical: 1.56 A @ 5 V, 0.16 A @ 12 V (Celeron M 600/DDR 256 MB)
	Power Consumption (Max, test in HCT)	MAX: 2.11 A @ 5 V, 0.17 A @ 12 V (Celeron M 600/DDR 256 MB)
	Power Management	APM, ACPI S1, S5
	Battery	3 V / 210 Mah
Environment	Operational	0 ~ 60° C (32 ~ 140° F)
	Non-Operational	Operating: 0 ~ 60° C (32 ~ 140° F) (Operating humidity: 40° C @ 85% RH non-condensing) Non-Operating: -40° C ~ 85° C and 60° C @ 95% RH non-condensing
Physical Characteristics	Dimensions (L x W)	146 x 102 mm (5.7" x 4")
	Weight	0.85 kg (1.87 lb), weight of total package

Board Diagram



Ordering Information

Part No.	CPU	CRT	LVDS	TTL	LAN	IDE/SATA	USB	RS-232	RS-232/442/485	LPT	CF	PC/104	Thermal Solution	Operating Temp.
PCM-9388F-M0A1E	Celeron M 600 MHz (512 KB)	1	1	1	1 FE	1 IDE	2	1	1	1	1	1	Passive	0 ~ 60° C
PCM-9388F-S0A1E	Celeron M 1 GHz (0 KB)	1	1	1	1 FE	1 IDE	2	1	1	1	1	1	Passive	0 ~ 60° C
PCM-9388SF-S0A1E	Celeron M 1 GHz (0 KB)	1	1	1	1 FE	1 SATA	2	1	1	1	1	1	Passive	0 ~ 60° C
PCM-9388Z-512S0A1E	Celeron M 1 GHz (0 KB)	1	1	1	1 FE	1 SATA	2	1	1	1	1	1	Passive	-20 ~ 80° C

Packing List

Part No.	Description	Quantity
	PCM-9388 SBC	
	Startup Manual	
	Utility CD	
1701440504	IDE cable (44p/44p/40p)	x 1
1700060202	KB/MS cable	x 1
1701140201	RS-232/422/485 cable	x 1
1700260250	Parallel Port cable	x 1
1703100152	Audio cable	x 1
1703100121	USB cable (2 ports)	x 1

Optional Accessories

Part No.	Description
1703200201	ATX power cable
1700001531	LTP to FDD cable

Embedded OS

	Part No.	Description
OS	WinCE 6.0	2070007811: CE60 Pro Intel (852/855/915/945) 2 COM V1.2 ENG
	Win XPE	2070007789: XPE WES2009 Intel-Mulitprocess V4.0 ENG

Module I/O-160 Series

RoHS COMPLIANT 2002/95/EC

MIO-6251

MIO module with 1 slot Mini PCI, Audio MDC

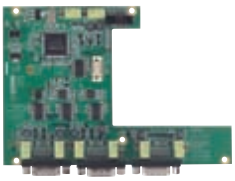
Specifications

1-slot Mini PCI		
Data Bus	32-bit data bus (compliant with PCI Bus Specification 2.1)	
PCI Interface	3.3 V interface (5 V tolerant)	
Mini PCI slot	1 Mini PCI type III A slot	
Audio	Supports AC97 Audio stereo sound (by cable with MIO base board)	
	Audio Cable	P/N# 1700002102
	Audio Output	Speaker-Out, Line-In, Mic-In
MDC (Mobile Daughter Card) Interface	Optional	
Dimensions	102 x 85 mm, (4.7" x 3.3")	
Environment	0 ~ 60° C, operating temperature	
Operating Humidity	10% ~ 90% relative humidity, non-condensing	

Ordering Information

P/N	Description
MIO-6251-00A1E	MIO module with 1 slot Mini PCI, Audio MDC

MIO base board: PCM-9380, PCM-9386, PCM-9382



MIO-6253

4 COMs MIO Module

Specifications

Chipset	SMSC SCH-3114 LPC I/O with Multiple Serial Ports Controller
Serial Port	3 x D-Sub connector serial RS-232/422/485 Ports and 1 x box header (share with internal M2M port for wireless)
Dimensions	102 x 146 mm, (4.7" x 5.7")
Environment	0 ~ 60° C, operating
Operating Humidity	0% ~ 90% relative humidity, non-condensing

Ordering Information

P/N	Description
MIO-6253-00A1E	4 COMs MIO Module

MIO base board: PCM-9380, PCM-9386

MIO-6254

Audio/DVI/TV-Out MIO Module

Specifications

Audio	AC97 Codec Realtek ALC202, Chrontel CH7009A
Audio Output	Dual Channel 6W Stereo Audio Speaker-Out, Line-In, Mic-In
Video Output	DVI, TV-Out, S-Video
Dimensions	102 x 146 mm, (4.7" x 5.7")
Environment	0 ~ 60° C, operating
Operating Humidity	0% ~ 90% relative humidity, non-condensing

Ordering Information

P/N	Description
MIO-6254-00A1E	Audio/DVI/TV-Out MIO Module

MIO base board: PCM-9380, PCM-9386

MIO-6260

Multi I/O Module with 1 LAN, 2 COM, 4 USB

Specifications

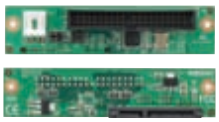
Chipset	Intel® 82551ER (MIO-6260L) NEC uD720101 PCI USB 2.0 controller SMSC SCH-3114 LPC I/O with multiple serial ports Controller
I/O Interface	1 x RJ-45 (MIO-6260L), 2 x USB connector, 2 x box header, 2 x RS-232/422/485 by D-Sub connector Serial ports jumperless, with auto flow control
Standard	USB 2.0 compliant; IEEE 802.3u 100 Mbps Fast Ethernet compatible
Dimensions	102 x 146 mm, (4.7" x 5.7")
Environment	0 ~ 60° C, operating temperature
Operating Humidity	10% ~ 90% relative humidity, non-condensing

Ordering Information

P/N	Description
MIO-6260-00A1E	MIO module with 2 COM, 4 USB
MIO-6260L-00A1E	MIO module with 1 LAN, 2 COM, 4 USB

MIO base board: PCM-9380, PCM-9386, PCM-9382

Riser Cards



PCM-233A

SATA to IDE Module for SATA Device

CE FC

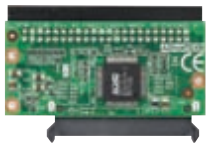
Specifications

General	
Chipset	ACARD ARC772N
Power Input	+3.3 V, +5 V, +12 V
PATA Connector	40-pin IDE connector
SATA Connector	7+15P SATA connector
External Power	+5 V, +12 V
Mechanical and Environmental	
Dimensions (L x W)	98 x 32 mm (3.8" x 0.9")
Weight	30g
Operating Temperature	0 ~ 60° C (32 ~ 140° F)
Storage Temperature	-45 ~ 85° C (-40 ~ 185° F)
Operating Humidity	0% ~ 90% relative humidity, non-condensing

Ordering Information

Standard

Part Number	Description
PCM-233A-00A1E	SATA to IDE module for SATA device



PCM-233B

SATA to IDE (44-pin) Converter Module

CE FC

Specifications

General	
Chipset	ACARD ARC772N
PATA Connector	44-pin IDE connector
SATA Connector	7+15P SATA connector
Mechanical and Environmental	
Dimensions (L x W)	53 x 25 mm (2.1" x 1.0")
Weight	30g
Operating Temperature	0 ~ 60° C (32 ~ 140° F)
Storage Temperature	-45 ~ 85° C (-40 ~ 185° F)
Operating Humidity	0% ~ 90% relative humidity, non-condensing

Ordering Information

Standard

Part Number	Description
PCM-233B-00A1E	SATA to IDE (44-pin) converter module

PCM-233C

IDE (44-pin) to SATA Converter Module

CE FC

Specifications

General	Chipset	ACARD ARC772N
	PATA Connector	44-pin IDE Connector
	SATA Connector	7P SATA Connector
Mechanical and Environmental	Dimensions (L x W)	53 x 25 mm
	Weight	30g
	Operating Temperature	0 ~ 60° C (32 ~ 140° F)
	Storage Temperature	-45 ~ 85° C (-40 ~ 185° F)
	Operating Humidity	0% ~ 90% relative humidity, non-condensing

Ordering Information

Standard

Part Number	Description
PCM-233C-00A1E	IDE (44-pin) to SATA converter module